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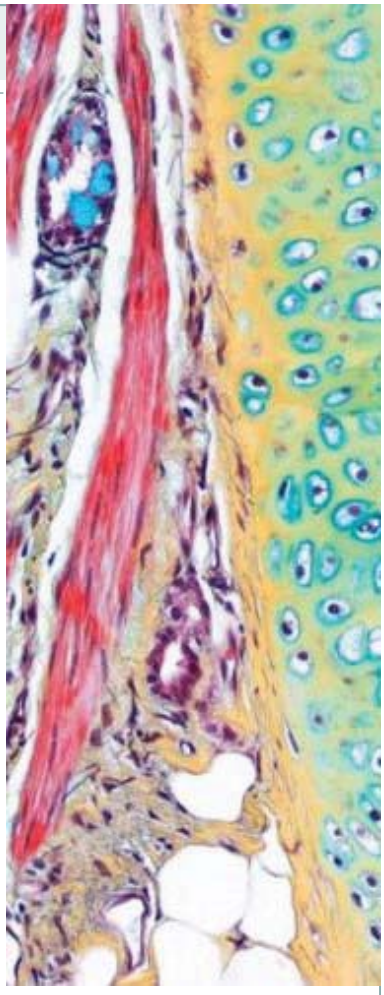
ISSUE 3
November 2019

Newsletter of The Histotechnology Society of NSW

HISTOGRAPH



Editorial

Hi and welcome to the last issue of the Histograph for 2019. I can't believe the year has already come to an end. We had an awesome and busy year providing continuing education for members and non-members. Thank you to the committee, sponsors and members for your support in helping us provide education opportunities for histology professionals.

Hope most of you got to celebrate International Pathology Day . It was on the 11th of November. It's a day dedicated to highlight the essential role of pathology in healthcare.

Some interesting articles for you to read. Katherine Munoz a Pathologist Assistant in DHM wrote an article about her experience attending the American Association of Pathologist Assistants 45th Annual conference in Chicago. An technical article on how to make a Gram control by Momoko Sakaki. Answer to the last issue Test & Teach from Tony Henwood. A Thank you retirement note from Mike & Jenny Rentsch

Remember to try your skills with our Test and Teach quiz. It is entertaining and highly educational.

The committee wishes everyone a Merry Christmas and a Happy New Year. Keep cool over the summer period. Until next time

Linda Prasad

INSIDE THIS ISSUE

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Attendees of these medium-level webinars are eligible to receive one (1) PACE Credit*, one (1) Florida CE Credit*, or a certificate of attendance for each completed webinar.

Examples of recent webinar topics include: *The Cost of Reprocessing, AP Lab Quality Journey – Aligning Administration, Lab Leadership and Pathologists to Raise the Quality Bar, Mitigating Risk and Improving Patient Safety,* etc.

For a comprehensive list of educational webinars visit: leicabiosystems.com/pathologyleaders/webinars

*PACE and Florida CE Credits are available after viewing the archived recordings up to 6 months after the original live webinar date.

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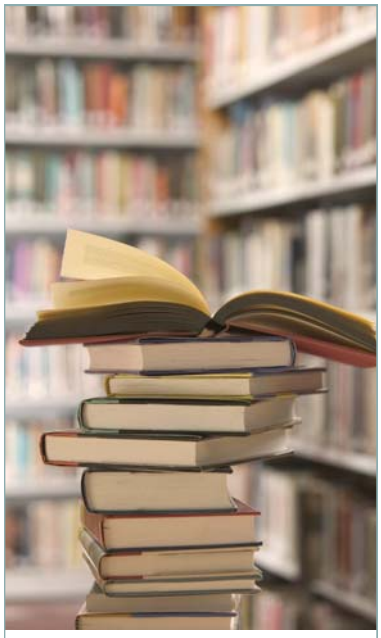

Histotechnology Society of NSW COMMITTEE MEMBERS are volunteers who work tirelessly to promote histotechnology and provide educational opportunities for continuing professional development. Thank you team for the GREAT JOB

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Position	**Name**	**Organisation**
Editor- Histogrpah	Linda Prasad	Children's Hospital, Westmead
Sub-committee Member	Momoko Sakaki	Children's Hospital, Westmead
Sub-committee Member	Cristina Antonio	Douglass Hanly Moir Pathology

Chairman's Report

A number of things to report in this Histograph issue.

We held our first Webinar in August. "Microscope Slides: the old and the New", presented by Alex Anderson from Trajan Scientific and Medical and my-self. We covered the history, types of slides/cover glasses, chemistry of working with glass, problems, handy hints and more.

Due to some technical issues regarding logging into the Webinar we repeated the Webinar in September. With issues resolved, the repeated session went like clockwork with many questions at the conclusion of the presentation.

We were based at The University of Technology, Sydney and the Webinar was held in conjunction with the UTS science subject 91402, Anatomical Pathology. Utilising a room set up for webinars, enabled the Webinar to be recorded for future reference and adding it to our website for member access. We are looking at holding more of these next year.

In September we also held a "Tissue Recognition Workshop: Travel through the Alimentary Tract from Oesophagus to Anus". A dry workshop, presented by Dr Tamara Sztynda and Dianne Reader at the UTS facilities. A good attendance. Sponsored by Agilent.

Our last function for 2019 was our "Annual General Meeting" held at North Ryde RSL on 25th of October. A presentation on "Immersive Virtual Reality in Education", was presented by one of the Committee members, Leah Simmons from TAFE NSW. The meeting was sponsored by Leica Biosystems.

An update on the formation of a "National Organisation and Committee"- following completion of a proposed constitution and agreement by all States, registration was instigated with the

"NSW Department of Fair Trading". Our registered name being "Histology Group of Australia [HGA]". It is pleasing to announce the approval has been confirmed and we now have a National body. There are two committee representative from each State. The chairman being the chair per-son from the State holding the next National Conference. As the next National Confer-ence is being held in NSW, I will be the Chairperson, Bharathi Cheerala, Deputy Chair and Mark Bromley the Secretary/ Treasurer. I will also cover the Public Officer position.

We now progress to setting up banking facilities, Website and Domain. The logo will be the one designed by the South Australian group for the last National Conference. After many years of discussions it is pleasing to see a National body come to fruition.

The “Certification of the Med Lab Scientific Workforce” being prepared by “ Human Capital Alliance”, is now to be looked at by the “ National Group” committee.

Update on the next National Conference being held at the International Convention Centre [ICC], Sydney, 3rd to the 6th of June 2021. We have booked two rooms on the Thursday at ICC to hold workshops. Issues have now appeared holding workshops at UTS and Sydney TAFE during the week due to teaching commitments. The program is being worked on by IAP and ourselves. Input coming from our other state committees. Doltone House at Darling Harbour has been booked for our Conference dinner on the Saturday night.

Plans are now underway for workshops, webinars and seminars for next year. We are always interested in input from our members on topics to present.

Information on Workshops and seminars is being updated regularly so please review our website and Facebook page.

Our committee wishes you a safe and enjoyable Christmas Holiday break and we look forward working with you in 2020.

Cheers,

Trevor Hinwood. Chairperson,

Histotechnology Society of NSW.

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Retirement Thank you.

To all our fellow Scientists/Technicians/Clients,

Jenny & myself wish to thank you for your continued support of Australian Biostain over the last 30 years. On July 1st 2018 we sold our business and while we stayed on for a few months we are now retired.

Our aim was to always provide the best quality, and service possible at all times, including technical support.

We have established many friends in the industry at all levels over the years, and we hope we have the opportunity to maintain contact in the future.

Yours sincerely,
Mike & Jenny Rentsch

Workshops 2020:

- **March:** Pitfalls of Processing (free workshop) - Saturday 28 March 2020
- **May:** Processing machines (Webinar)- Saturday 23 May 2020
- **July:** Skin Histology by Location (Dry workshop)- Saturday 25 July 2020
- **August:** Digital Histology (Webinar)- Thursday 27 August 2020
- **September:** Skin Pathology (Dry workshop)- Saturday 12 September 2020
- **November:** Skin Pathology Staining (Wet workshop) - Saturday 14 November

Test and Teach – From the Literature

Tony Henwood, Histopathology, the Children's Hospital at Westmead, Sydney

One of the important aspects of individual Continuing Education is the reading and analysis of published journal articles. This will also be an important feature of the upcoming National Registration Scheme for laboratory professionals. It is sometimes perplexing trying to understand the "Methods" section of some of these articles and I have collected a few and presented them as snips for your comments. Answers next issue:

1. This from a table in a paper concerning immunohistochemical tests on a cohort of tumours. Can you pick the typo, well at least we hope it is a typo?

Biological marker	Functions	Clone	Species	Dilution	Antigen retrieval	Source
Fragile histidine triad (FHIT)	Tumor suppression	RB-9232	Rabbit	1:300	HIER pH 6	Lab Vision/Neo Markers
p53	Tumor suppression, apoptosis	M7001	Mouse	1:1000	HIER pH 6	DakoCytomation
p16	Tumor suppression	NCL-p16-432	Mouse	1:100	HIER	Novocastra
Retinoblastoma protein (Rb)	Tumor suppression	554136	Mouse	1:300	HIER pH 9	Pharmingen
$CD4^+$	Immune defense	NCL-$CD4^-$	Mouse	1:25	HIER pH 9	Novocastra
IL-10	Immune suppressor	RHCIL1000	Rat	1:100	HIER pH 6	Caltag
EGFR	Proliferation	28-0003	Mouse	1:40	Proteinase K	Zymed
Ki-67 (MIB-1)	Proliferation	M7240	Mouse	1:200	HIER pH 9	DakoCytomation
CK 10	Cytoskeleton	MS-611	Mouse	1:600	HIER pH 9	Lab Vision/Neo Markers
E-cadherin	Cell-cell adhesion	13–1700	Mouse	1:2500	HIER pH 9	Zymed
Cox-2	Inflammation, angiogenesis	18–7379	Mouse	1:2000	HIER pH 9	Zymed
c-*myc*	Cell cycle progression, malignant transformation	M3570	Mouse	1/600	HIER pH 19	DakoCytomation

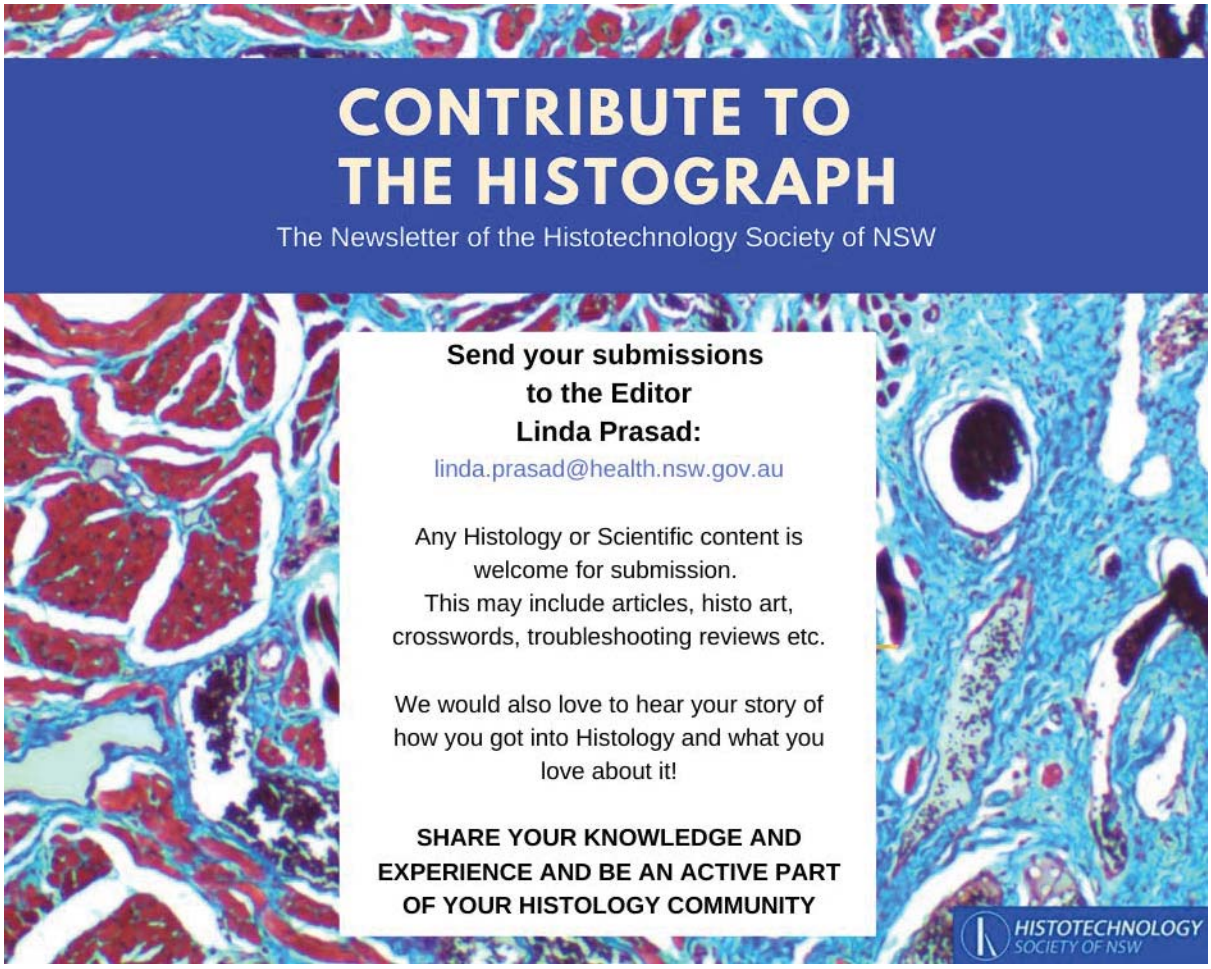
2. Sometimes we need to reproduce the staining conditions presented in an article for possible introduction in our laboratory. Would the following snip allow this?

Needle biopsy tissues were fixed in 10% neutral buffered formalin. Multiple 3-um paraffin sections were stained using haematoxylin and eosin. All tissues were also stained using a monoclonal antibody to SV40 large T antigen (Oncogen Research Products, Cambridge, MA, USA), using standard immunoalkaline phosphatase methods preceded by pressure-cook antigen retrieval for 5 min in Ventaqna retrieval buffer (pH 10.0; Ventana Medical Systems, Tucson, AZ, USA). Diaminobenzidine tetrahydrochloride was used as a chromogen. The monoclonal antibody detects epitopes unique to the PV large T antigen, shared by SV40, BK and JC viruses.

3. A mathematics problem for you. The following snip was from an article on urine cytology. Would you be able to use the parameters presented to duplicate the centrifugation conditions in your laboratory?

Urinary cytopathology protocol

The urine sample collected was the midstream of the first voided urine in the morning. Next, 10 ml of urine was centrifuged at a radius of 155mm for 10 min. The supernatant was removed, and the pellet was cytocentrifuged (cytospin) at a radius of 100.6mm for 6 min. Two smears were subjected to Papanicolaou staining. The whole circular area of



TISSUE RECOGNITION WORKSHOP

TRAVEL THROUGH THE ALIMENTARY TRACT
FROM OESPHAGUS TO ANUS

PRESENTED BY

Dr Tamara Sztynda (UTS)
and Dianne Reader (RNSH)

The tissue recognition workshop, Travel through the Alimentary Tract, was held on Saturday, 14th September at the University of Technology Sydney hosted by AGILENT and the Histotechnology Society of NSW, was to get the delegates to be comfortable in recognising the different parts of the gastrointestinal tract.

After the setting-up of microscopes and explaining general safety explanations, the workshop got into full swing with the structure of the gastrointestinal tract. This was something that Labby really got his teeth into. Tamara had drawn a A3 diagram of the alimentary tract showing both the similarities and identifying differences in from oesophagus through to the anus. More information was available to the delegates in the booklet which Dianne prepared and included a table on recognising the structures and photographs marking these features. When it came to identification of the unknown slides the delegates enjoyed the opportunity to put what they had learned into practice.

Everyone seemed to laugh at their errors and enjoyed the opportunity to for their continuing refresher education.

Morning tea and lunch was used for networking and everyone seemed to have a good day discussing what they would like to see next year in this type of workshop.

Hopefully, Tamara and I have managed to help everyone recognize the fundamental aspects of the alimentary tract.

We would like to thank the gentlemen from AGILENT (Paul Steward and Scott Reed) without whom this workshop could not be run as they supplied help with our set-up of the workshop, the food as well as good company.

Everyone learned and took away new way at identifying bit of the gastrointestinal tract from this workshop which is what it is all about.

To all of those from the Histotechnology Society of NSW who showed up to help a big thankyou as both Tamara and I could not have done this without your support. Special thanks for Dr Carol Lazer who is not a member of our Society who volunteered to lend her histology teaching expertise.

Dianne Reader

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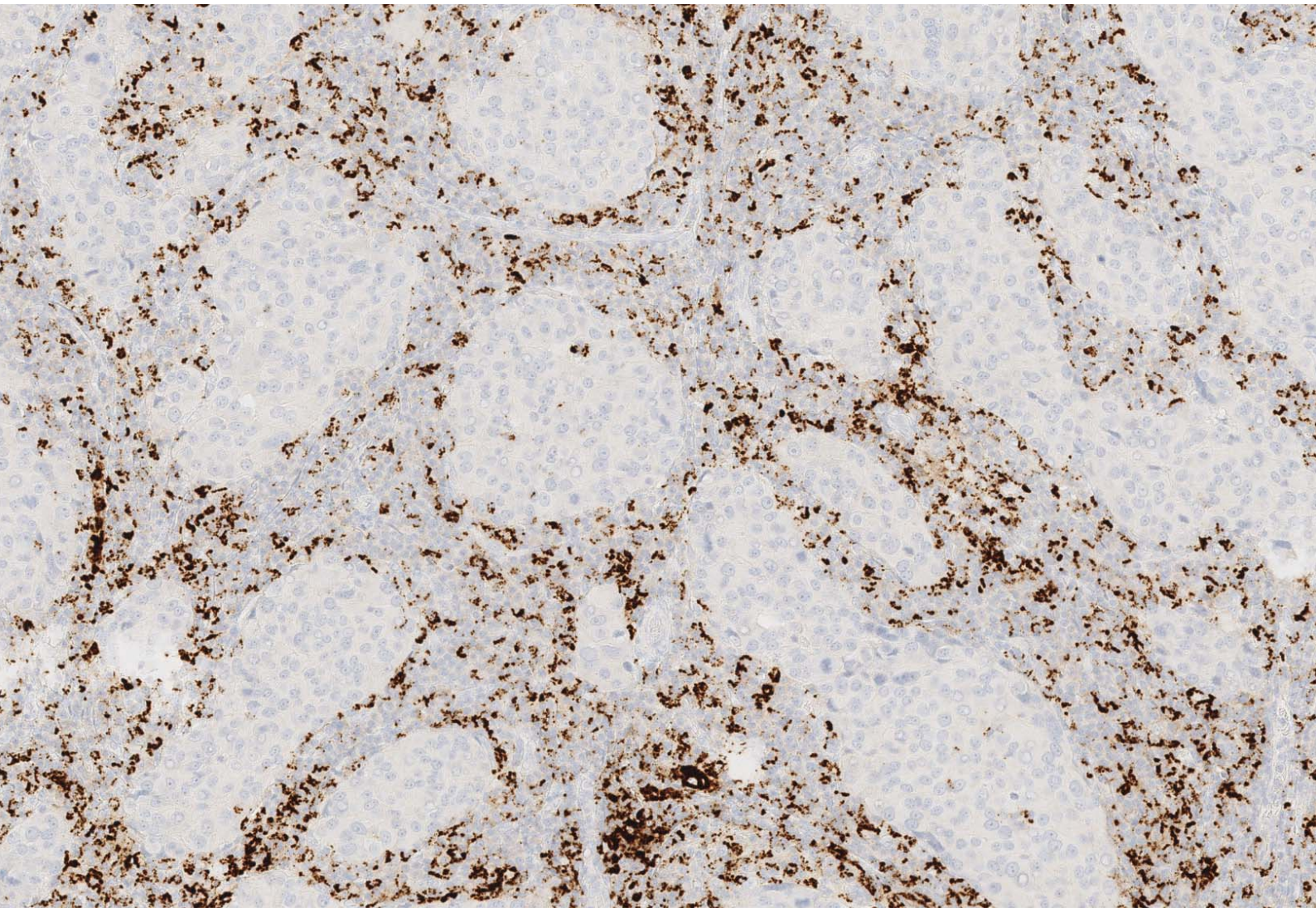

1. Ventana Medical Systems Inc. VENTANA PD-L1 (SP142) Assay Package Insert.
2. TECENTRIQ Prescribing Information.

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DOUGLASS HANLY MOIR PATHOLOGY
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The Future of Cut-up Down Under

A Scientists' perspective attending the American Association of Pathologists' Assistants 45TH Annual Continuing Education Conference 2019 Chicago, Illinois USA

Written By Katherine Munoz

In August 2019, I had the privilege to attend the American Association of Pathologist's Assistance (AAPA's) 45th Annual Continuing Education Conference in Chicago, USA. The conference is held to provide relevant, up-to-date continuing education to students and allied health professionals in the field of Cut-up or Grossing.

I ventured solo. Braving the wilderness to try and find a sense of belonging in a role that has yet to be professionally recognised in Australia. Here's a little background to my story.

My journey into the Histology Cut-up bench began in 2006. I was a fresh UTS Biomedical Science graduate. With high hopes and a passion for human anatomy and disease, nothing completely prepared me for the steep learning curves of specimen dissection.

The late Grant Taggart was my Manager at the time. In 2008, he supported me in the quest to find job-related continuing education. I completed the Graduate Certificate of Pathology Preparation at UniSA, through DHM's scholarship program. The course fuelled my interest in performing all simple and non-complex categorised specimen dissection as outlined in the NPAAC guidelines.

In 2014, my colleague Richard Farquharson and I sought to attend the Canberra Surgical Cut-up Workshop. The weekend workshop provided a hands-on introduction of some complex categorised specimens.

By 2017, the role of the Scientist at the Cut-up bench shifted dramatically at DHM. The pool of transient Registrars needed support to relieve the increasing work load of some complex categorised specimens. Scientists like myself were provided on-the-job training (OJT). The call for in-house recognition enabled the Lab Management team to define our role at DHM as a Surgical Scientist.

As OJT continued, the gap in theoretical based knowledge became more apparent. With the full support of my Cut-up Co-ordinator Rick and Lab Manager Leanne Henderson, my continued quest for external sources of education tailored to the Surgical Scientist led me to the city of Chicago, USA.

The AAPA were hosting their 45th Annual Continuing Education Conference at the Hyatt Regency in Chicago. The Pathologists' Assistants (PA's) and students met from all over USA and Canada. Over 5 days, there were 19 lectures, 4 poster sessions, a wet workshop, an exhibitor's hall and a Laboratory tour to attend to.

The conference kicked off with a roaring 1920's themed welcome party. It was a fun and great way to meet and network with the organisers and attendees prior to the official program. I met with other international attendees from Christchurch (NZ) and Brisbane (Aus).

Welcome Party Photo booth

AAPA Board of Trustees – International Meet & Greet

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Conference Highlights

American Association of Pathologists' Assistants
45TH Annual Continuing Education Conference 2019
Chicago, Illinois USA

On official program, the lectures of interest that were relevant to my current and future workload included;

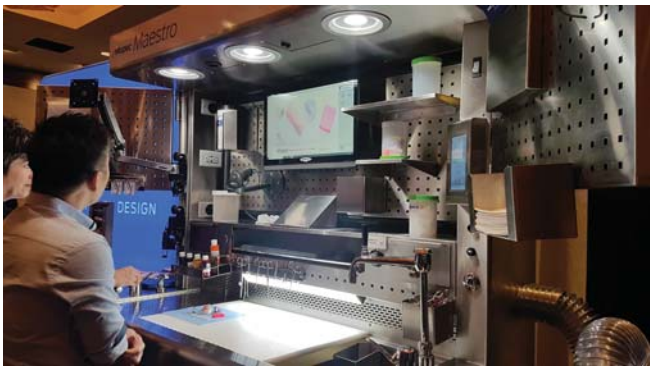
- Kidney, Bladder & Adrenal
- Prostate, Testis & Penis (Updates on PA's impact on diagnosis and staging)
- Ovarian Neoplasms
- Altered & Cryptic GIT and Hepatic Tumours
- Thyroid Pathology & Molecular Testing
- Twin-Twin Transfusion Syndrome
- Foetal Surgery in the 21st Century

Main Lecture Room

The offsite workshop at Ann & Robert H. Lurie's Children's Hospital was a hands-on experience. Diane Spicer (PA) discussed the anatomy and abnormalities of paediatric aortic root & aortic heart valves.

Paediatric Hearts – Wet Workshop

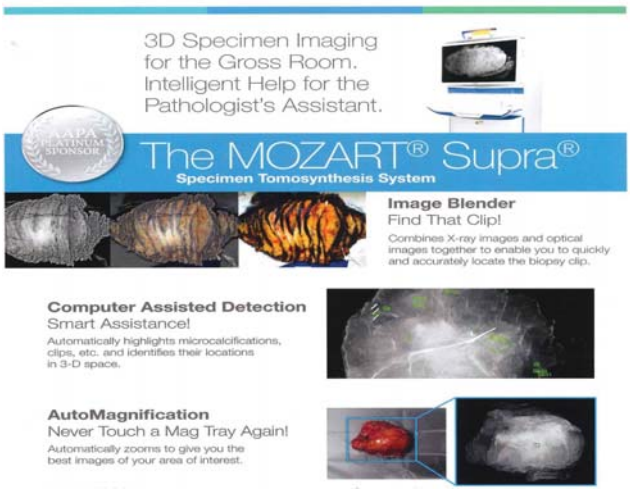
The exhibitor's hall showcased the current advances in medical technology and equipment available for the Histology Laboratory, in particular to Grossing.



Mopec's Newest Grossing Station – Maestro

Tissue-Tek's Replaceable Blade Scissors

Avantik's Snag-free & Rounded Blade Edge Trimming Knives



Kubtec's Medical Imaging System (image taken from AAPA Program)

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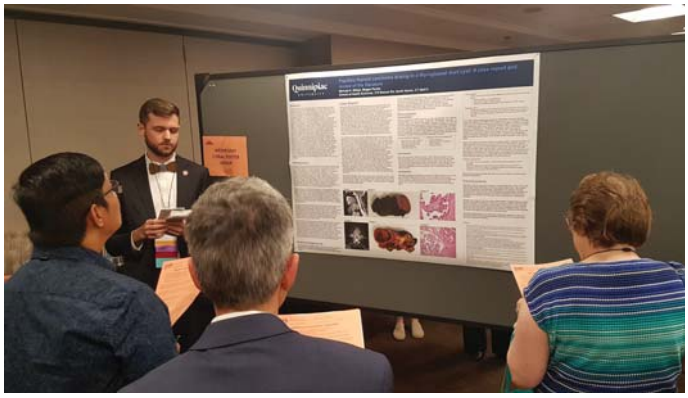
Conference Highlights

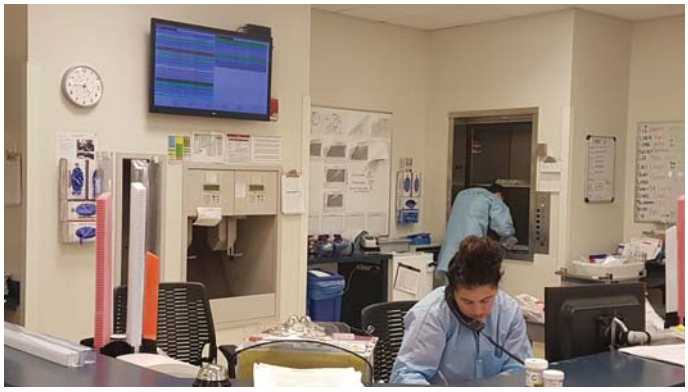
American Association of Pathologists' Assistants
45TH Annual Continuing Education Conference 2019
Chicago, Illinois USA

The student poster sessions highlighted some incredible real time patient case studies of rare diseases. There were 30 presenters over 4 days. Multiple choice quizzes were to be answered by attendees to gain continuing education credit points.



Papillary Thyroid Carcinoma Arising in a Thyroglossal Duct Cyst: A Case Study. Presenter from Quinnipiac University

A Laboratory tour at the University of Chicago was kindly organised by the AAPA Board of Trustees (BOT) for us International delegates. The Histology Department is physically separated into 2 distinct units; Specimen Reception Area & Grossing are independent of the Main Lab area.



Specimen Reception Area

Grossing Area

Formalin Pump Station to source each Grossing bench formalin on tap

Main Lab Area

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The Future of Cut-Up Down Under

A Scientists' perspective attending the American Association of Pathologists' Assistants 45TH Annual Continuing Education Conference 2019 Chicago, Illinois USA

By the time I was over jet-lag, it was time for me to head home. I embarked with little knowledge of the AAPA and the educational journey of a Pathologist's Assistant. After a week, I felt connected. This was the one thing I didn't expect; to feel a sense of professional belonging and acceptance with people I had just met.

The calibre of current education and learning presented at the conference was everything I hoped it would be. The professional recognition of PA's validated my continued advocacy to the role of all Scientists at the Cut-up bench.

The first Pathologist Assistant Program began in 1965 at Duke University, North Carolina USA. It celebrated its 50th Anniversary in 2015 (https://fmch.duke.edu).

So, the question remains; can we too establish a formal education pathway for Scientists performing Cut-up in NSW and ultimately Nationwide?

I come home with invaluable connections, insightful knowledge and a fresh new perspective. I continue to have a positive outlook about the potential future of Scientists at the Cut-up bench in Australia.

It all starts with conversation. And conversations lead to change.

Written By
Katherine Munoz
Senior Surgical Scientist
Histology Department
Douglass Hanly Moir Pathology

Chicago City Skyline at Navy Pier

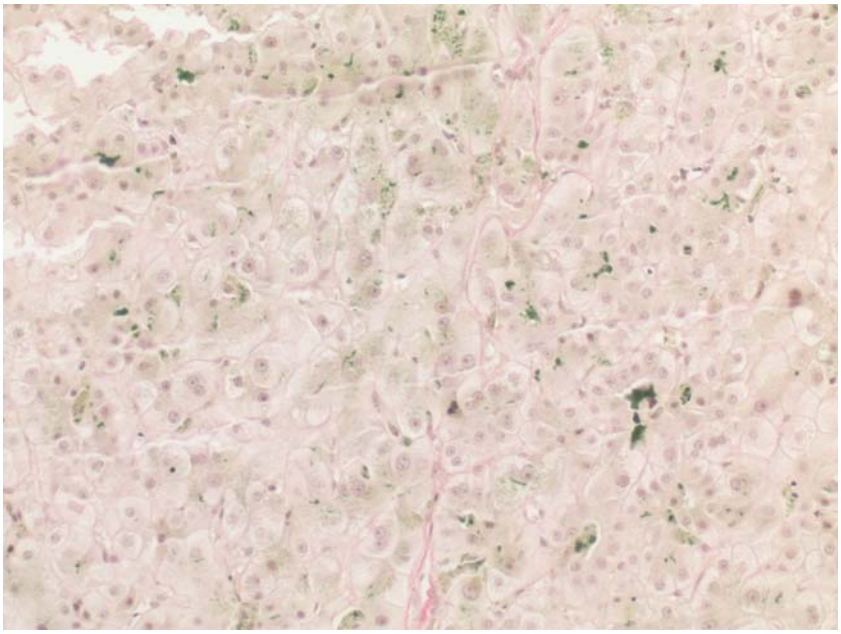
View from Chicago 360 - John Hancock Building

TEST AND TEACH FROM LAST ISSUE

Tony Henwood, Histopathology, the Children's Hospital at Westmead, Sydney.

ANSWERS

1. **What is the tissue—Liver**
2. **What is the pigment-Bile**
3. **What stain would you use to demonstrate it—Read the article**



Bile is produced by hepatocytes and then stored in the gall bladder prior to release into the duodenum. Bile consists of approximately 95% water in which a number of endogenous solid constituents including bile salts, bilirubin phospholipid, cholesterol, amino acids, steroids, enzymes, porphyrins, vitamins, and heavy metals, as well as exogenous drugs, xenobiotics and environmental toxins are dissolved. Bile serves several important functions (Boyer 2013):

- Bile is the major excretory route for potentially harmful exogenous lipophilic substances, noted above, as well as other endogenous substrates such as bilirubin and bile salts whose molecular weights are >300 to 500 daltons and not readily filtered or excreted by the kidney.
- Bile salts are the major organic solutes in bile and normally function to emulsify dietary fats and facilitate their intestinal absorption.
- Bile is the major route for elimination of cholesterol.
- Bile protects the organism from enteric infections by excreting immune globulin A (IgA), inflammatory cytokines, and stimulating the innate immune system in the intestine.

The term "Bile pigment" is often used to describe the collection of pigments that result from red blood cell breakdown including bilirubin, haematoidin, biliverdin and bile. When the red cell membrane is ruptured, the haemoglobin is released and is broken down so that the protein and iron it contained may be recycled. The heme portion is split from the globin protein component, haemoglobin is phagocytosed by macrophages with the globin broken

down to constituent amino acids and the associated iron either transported to the bone marrow or combined with apoferritin to form hemosiderin. What is left of the haemoglobin molecule is the opened porphyrine ring minus the iron, which is formed into biliverdin in the phagocytic cells. This is transported to the liver where it is reduced to bilirubin (Brown 1988, Boyd 2013).

Under certain conditions (usually blood extravasation and subsequent haemoglobin metabolism in a closed tissue compartment under a low oxygen tension environment - anaerobic), biliverdin undergoes a chemical change that hampers its transportation to the liver, and it stays trapped in the tissues instead. The pigment resulting from this transformation is known as haematoidin. However, haematoidin can be converted back to biliverdin, which explains why hematoidin is not a common finding in biopsies (Fernandez-Flores 2015).

Bile is not autofluorescent, in contrast to lipofuscin. Because bile can be poor in iron, it is not usually stained by traditional histochemical stains for iron (in contrast to hemosiderin), such as Perl's Prussian blue, Hukill and Putt's, or Lillie's method. However, bile can be detected by the Fouchet's technique, in which the pigment is converted into biliverdin (green) and cholecyanin (blue) by the oxidative action of the ferric chloride in the presence of trichloroacetic acid. To accentuate the green colour, a counterstaining with van Gieson's solution can be used (Fernandez-Flores 2015).

The usual methods for demonstrating bile pigments are the Gmelin Method (real-time observation of the treatment of the section with nitric acid where bile changes colour from yellow to green then blue, purple and finally red), Stein's Method (reaction of bile with Lugol's Iodine), and Hall's method for bilirubin (Brown 1988). Bile is not birefringent, occasionally D-PAS positive, Schmorle's positive and argentaffilic.

References

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Fernandez-Flores, A. (2015). Two new forms of hematoidin in the skin. Journal of cuta-neous pathology, 42(12), 1026-1030.

ANNUAL GENERAL MEETING

The Annual General Meeting of the Histotechnology Society of NSW was held on Friday 26th September 2019. The year's achievements were discussed, which included the great seminars, workshops and seminars held at the University of Technology, Sydney. The hard work and dedication of Tamara Sztynda and Dianne Reader were acknowledged, who did a fantastic job in running these educational events.

Chairman Trevor Hinwood

Mark Mullin from Leica Biosystems, sponsor of the AGM


Chairman Trevor Hinwood presenting Tamara Sztynda

The educational presentation of the evening was Immersive Virtual Reality in Education presented by Leah Simmons. Leah described the current innovations TAFE NSW is developing to incorporate virtual reality into learning. The potential of this technology is truly ground-breaking, having applications such as performing dissections (without needing dead animals), teaching how to clean up glass or spills (without the danger) or taking students to museums (without the expense).

Attendees were able to try the virtual reality space created by Leah, where users selected appropriate PPE and virtually dressed the mannequin. A huge thank you to Leah for a fascinating presentation!

Leah Simmons presenting some of the hardware needed for virtual reality


Attendees Abby Ng, Bharathi Cheerela and Bill Sinai trying the virtual reality application


Newly elected Histotechnology Society of NSW Committee (minus a few members)


Catering sponsored by Leica Biosystems

Fred Reader, Mark Mullin, Trevor Hinwood and Labby

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Advice from our pathology specialists

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Showing the right path

Contact us on 1800 257 213 for advice on workflow solutions specific to you.

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MAKING A GRAM CONTROL

Advantages of making a Gram control

⇒ Known cultures of bacteria are used; results of the gram stain are predictable

⇒ Valuable diagnostic tissue is not exhausted as a control

⇒ If a large piece of fresh tissue can be obtained, many gram control blocks can be made and used for a number of years

Obtain a piece of fresh tissue in a sterile container and keep in the fridge until ready.

Visit your friendly microbiology department

Obtain an inoculated broth medium with gram positive and negative bacteria

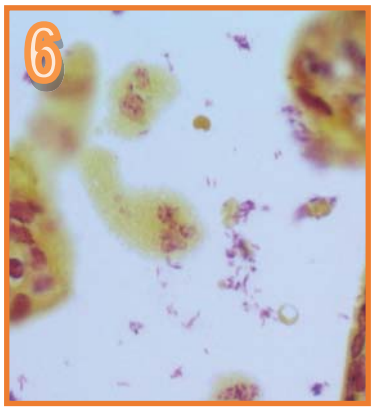
Labby used *Staphylococcus aureus* (gram positive cocci) and *Escherichia coli* (gram negative bacilli) in Tryptic Soy Broth (TSB).

Incubate overnight at 37°C*

*Time depends on number of organisms needed. Temperature depends on organisms used.

Place pieces of fresh tissue into the broth and incubate again for a few hours (or overnight)*

Remove tissue from TSB into fixative. Process tissue as appropriate for your fixative and tissue size.



Embed and section the tissue and run a Gram stain to check the control has worked

Technical Tips

⇒ Incubate the innoculated broth first without tissue. From experience, Labby has found that adding tissue and bacteria together appears to inhibit the growth of the bacteria.

⇒ If making a mixed culture, using microorganisms with different shapes (e.g. one cocci, one bacilli) helps easily distinguish the microorganism, even with overdifferentiation. Otherwise, make two separate controls, one gram negative and one gram positive

⇒ Using less dense tissue with "spaces" such as placenta or lung makes the microorganisms easier to visualise

⇒ Utilise the expertise of your microbiology friends for selecting organisms, growth media, incubation time, etc.

Special thanks to Caylee Ho, Microbiology Scientist at The Children's Hospital at Westmead for her assistance

Leica Biosystems' 3rd Annual BUGM

By Mark Mullin, Country SalesManager-Australia Leica Biosystems

On Saturday the 14th of September 2019 Leica Biosystems held its 3rd annual BOND User Group Meeting (affectionately called BUGM) at the Leica Biosystems office in Lane Cove, Sydney.

22 enthusiastic IHC Histologists gave up their Saturday to attend this meeting which was held from 9.30 am to 3 pm.

Alice Boulghourjian, (Product Applications Specialist of Leica Biosystems) presented eloquently on "The Value of a BOND Ready to use antibody" reminding everyone on the hidden costs associated with the use of a concentrate and NATA guidelines on usage post expiry date, etc. Marne Prinsloo, (Product Applications Specialist of Leica Biosystems) presented on Multiplexing IHC on the BOND RX instrument and his experiences in this process while at Peter MacCallum cancer centre in Melbourne. Damian Cockfield (Global Product Manager – BOND, of Leica Biosystems), presented on "The Last Slide Matters" & "Innovation Science with the BOND RX" these were very stimulating presentations. Trina Lum (IHC Manager from Royal Prince Alfred) presented RNA ISH, and the workup and utilisation of a new probe from Leica Biosystems. This stimulated a lot of questions. While Gillian Evans and Karina Burt both from Gosford presented on the process of changing an IHC platform from Agilent Autostainer 48 to the Leica Biosystems' BOND-III. This covered the process of change and the challenges that change brings to an IHC laboratory.

The delegates were extremely engaged with a lot of conversation during morning tea and lunch, importantly no one wanted to leave early.

These events are not easy to arrange so a big thanks to the team from Leica Biosystems in the preparation and execution. The biggest thanks have to go to the scientists who gave up their Saturday to attend. This is an annual event, so we hope to see many more of you at our next BUGM in 2020.

The Histotechnology Society of NSW is on Facebook!

https://www.facebook.com/Histotechnology-Society-of-NSW-466949980048716/

Like the page to keep up-to-date with the latest HSNSW events and to follow the adventures of our mascot, Labby the Histo Lab as he learns and has fun in the world of Histology.

What's new?

The Histotechnology Society of NSW has a **Discussion Group**. Join the group today to ask questions, share your knowledge and connect with your fellow Histotechs all around NSW and other states.

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