HGVT

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PARAFFINALIA NEWSLETTER

VOLUME 28, NUMBER 3

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.

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ABN 49725 623 468

Committee Page

The members of the Histology Group of Victoria 2024 are:

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Mark Bromley	Sullivan Nicolaides Pathology
Kellie Vukovic	Melbourne Pathology
Alistair Townsend	Royal Hobart Hospital
Christine Gorringe	Royal Hobart Hospital
Elizabeth Baranyai	Cabrini Health
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Snejana Ursache	Alfred Hospital
Gulnur Orman	Box Hill Hospital
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Presidents Address

Behind the Bench with Sam Arandelovic

Goodbye winter! Welcome spring…

The last couple of months have been very busy with all the social events happening locally and interstate.

Trivia Night.....Wow where do I start! Great venue, amazing service, delicious food and most importantly the attendance by so many of you.... 175 to be exact. It was lovely to see all the familiar faces and great to see some not so familiar ones.
The winner this year was TissuPath! Congratulations to both TissuPath tables for taking first and second place.
Looking forward to next year, and if we hit the books, we can knock TissuPath off their perch!

Also, I would like to thank Kellie our amazing HGVT social organiser for all the hard work!

National Histology Conference..... first conference after 5-year Covid pause. Well done to NSW Histo Group for organising a great event. Over 350 delegates for the 3-day event.
Feedback from the event has only been overwhelmingly positive and I certainly had a thoroughly enjoyable 3 days, listening to some superb presentations and relishing all the social events. The Saturday evening conference dinner was full of entertainment, with good food and wine, a band and plenty of Histologists taking to the dance floor.

Lastly our last Scientific Meeting will be on the 17th October and we will also conduct the AGM, so if you would like to be part of the HGVT Committee, please fill in the form in the newsletter.

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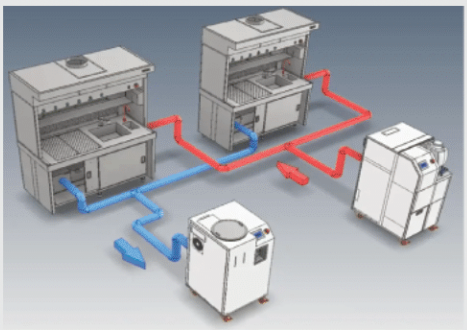

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Review by Kellie Vukovic

The 2024 Trivia night was a sell out in record time with our biggest numbers to date – we had 174 people attend on Friday 26th July across 23 tables. This year we moved to a new, bigger location which was a great success. The Burnley Brewing in Richmond was an excellent venue with great food and friendly staff who kept the drinks flowing all night. We also tried a new trivia company and our 2 hosts from Funky Bunch Trivia did a great job at keeping everyone interested and entertained. It was a great night to catch up with familiar faces and was so good to see so many people mingling the entire time.

We would like to say a huge thank you to our fabulous sponsors. Without your ongoing commitment nights like this are not possible – Leica, Metagene, TekMed, Roche and Agilent.

In the end there was no real competition with Tissupath the clear winners taking home the movie tickets. We hope to see you all back next year fighting it out for the inaugural wax trophy!

RANKING	TEAM	POINTS
1st	Tissupath #2	66
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TRIVIA NIGHT

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Under the Microscope

with Bron Christiansen

What was your first part time job?
Entering data in spreadsheet for a Wine tasting company.

What is your current Job?
Principal Scientist, RCH (Still entering data!)

How long have you been working in your role?
At RCH since 2006, but as PS since 2014

What skill do you want to learn and why?
I want to understand how things work so I can fix things! I am my father's daughter! I like to tinker but I want to fix things too so we don't have to throw them away!

If money was no object, what would you do all day?
Hmmm…. I would love to travel Australia and head to loads of little towns in search of the best baked goods! It would be good to be able to stay for a while in each area and meet the locals rather than buzzing through on the way to another destination!

What's an ideal weekend for you?
Honestly, it is just hanging out with my wife and doing boring stuff. Best is having a nap!

What's on your bucket list this year?
Western Australia! To be able to take the coast road and snorkel the reef all the way down!

What music/podcast is on your playlist at the moment?
I don't do music or podcasts but the most recent playlist on my phone is my son and his girlfriends playlist… Shared for my driving pleasure when I take them places… But I do like an epic 80's playlist!

Where do you most want to travel, but have never been to?
I would love to go to Japan. It seems cool and no one has ever said they hated it!

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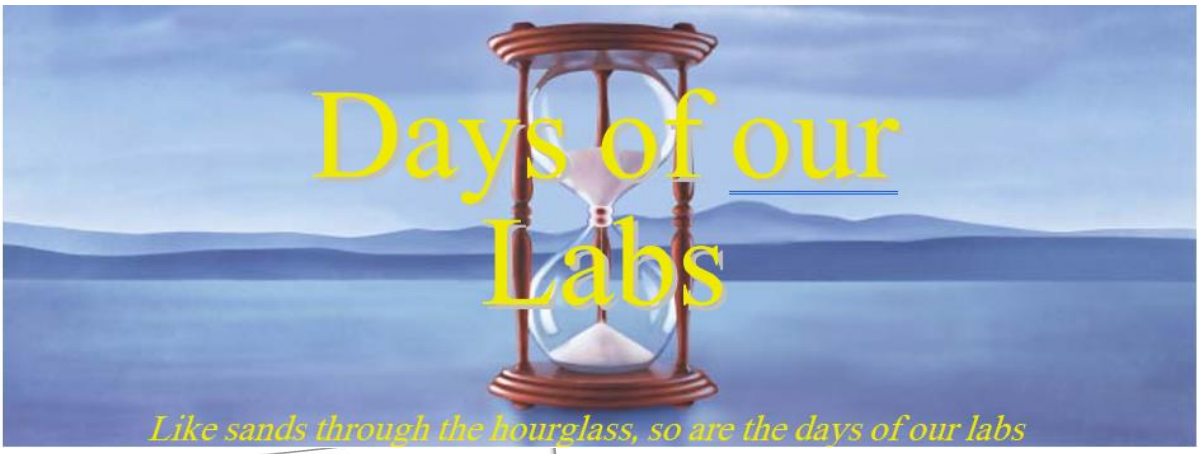


Congratulations to Randhara Athuraliya from Melbourne Pathology on the arrival of baby Kian born 1st July 2024.

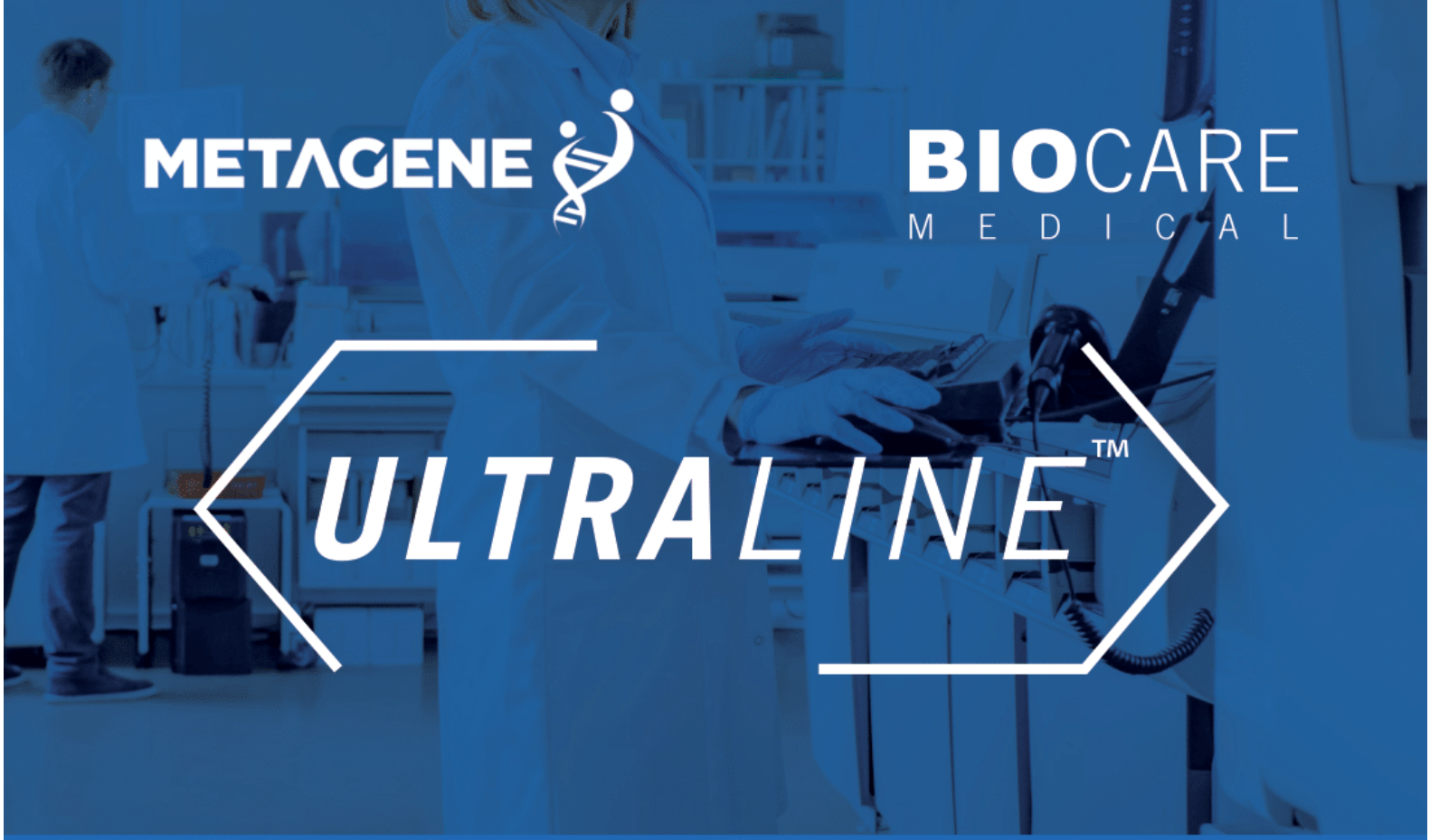
Elizabeth Baranyai's recent holiday to Tahiti

Histology News, Births, Marriages, Retirements??? Any news!!!
We would love to hear from you! Submit a pic and a short description to "Days of our labs" to the HGVT Facebook messenger or email editor@hgv.org.au

In the news

6 months of AP at Northern Health!

Congratulations to the team at Northern Health for getting through the first 6 months of lab Go-Live!



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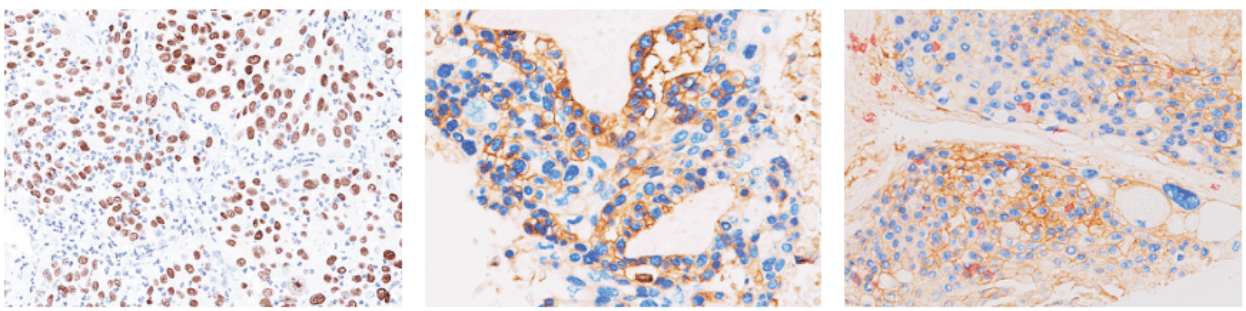

Under the Microscope

with Brian O'Campo

Q. What was your first part time job?
A. Volunteer emergency first-responder with St John Ambulance

Q. What is your current Job?
A. Medical lab technician at Cabrini Hospital in Melbourne

Q. How long have you been working in your role?
A. A little short of two years now

Q. What skill do you want to learn and why?
A. Consistently produce a Grocott stain by hand without leaving any silver precipitate on the slide. Very time- consuming and annoying, this stain!

Q. If money was no object, what would you do all day?
A. Navigate all the suburbs of Melbourne for the fluffiest potato cake (yes, this is the correct name for it)

Q. What's an ideal weekend for you?
A. Having good banter all day with total strangers in the pub about the footy, or lamenting the state of rugby union in Australia

Q. What's on your bucket list this year?
A. Receive colectomy specimens with the faeces already removed (please, I beg you)

Q. What music/podcast is on your playlist at the moment?
A. True Crime on ABC listen

Q. Where do you most want to travel, but have never been to?
A. Tasmania or New Zealand's south island

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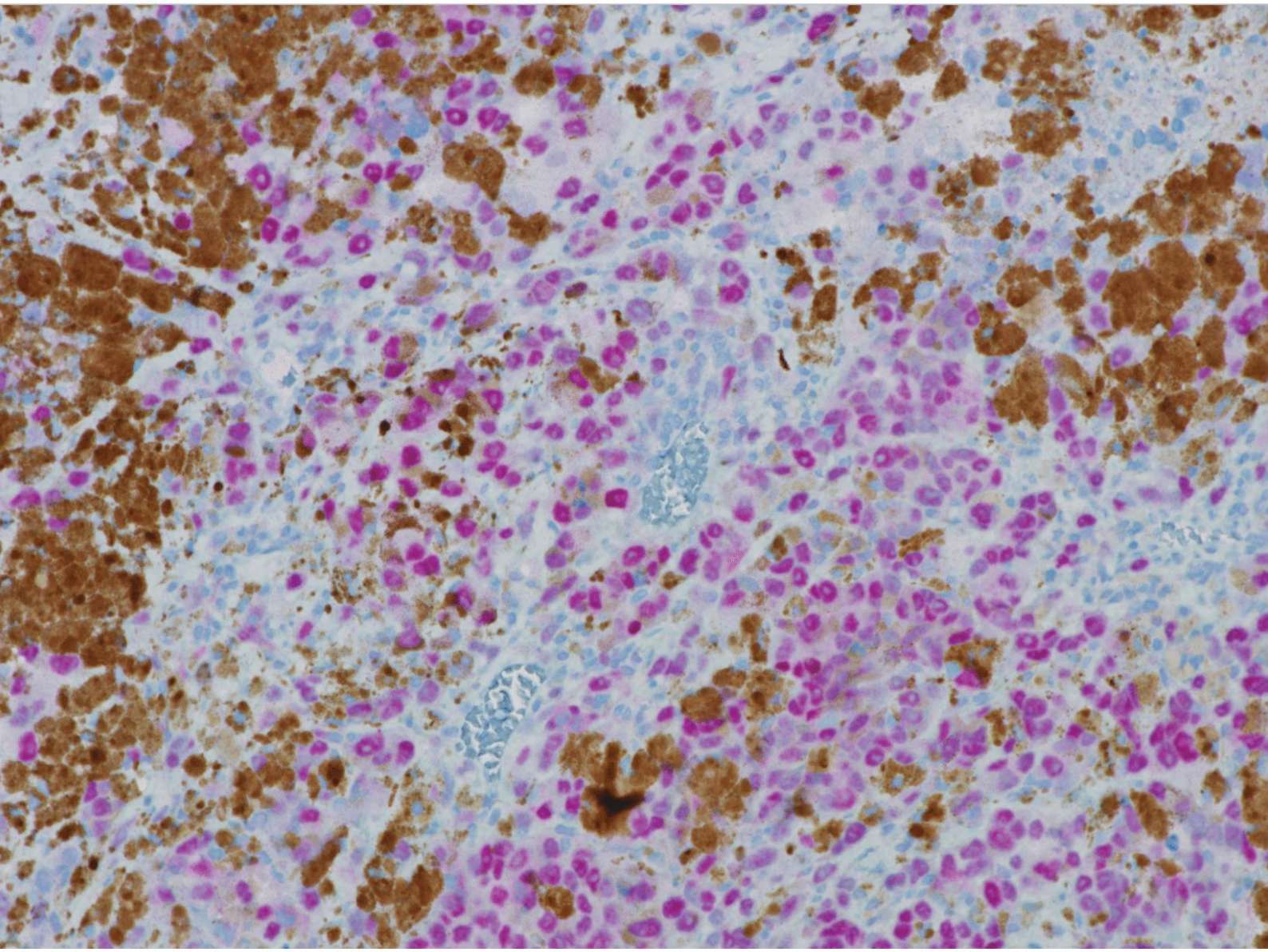

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Review of Scientific Meeting

Introduction to cutup -24th June 2024

HGVT Scientific Meeting Review by Tu Anh Huynh

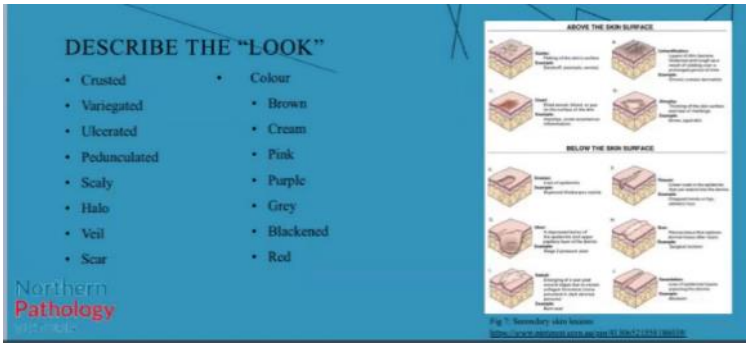
We were fortunate to have two seasoned cut-up scientists present a tutorial on simple and non-complex cut-up. Kerrie Howard, a senior scientist heading the Cut-up department at Northern Pathology, and Kellie Vukovic, a senior scientist leading the cut-up team at Melbourne Pathology, shared their expertise.

Simple skins and how to describe them – Kerrie Howard

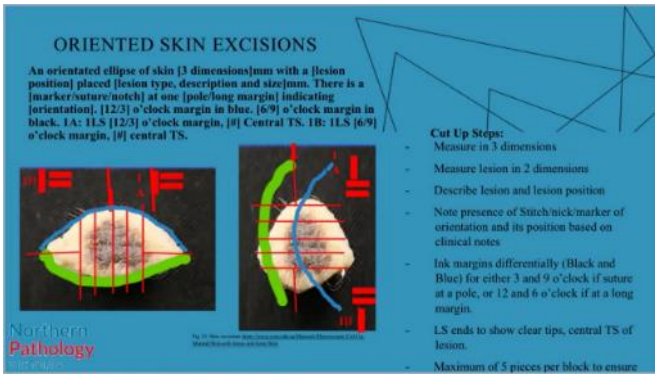
The process of skin cut-up is a critical step in the diagnostic pathway for dermatological conditions. As outlined by Kerrie, this task requires a combination of technical skill and a deep understanding of pathology.

The presentation delved into the complexities of handling various skin biopsy types, from skin shaves, punch biopsies, skin excisions and less frequently received skin biopsies. She pointed out the differences in collection, the skin layers involved and reasoning behind the choice of excision. A major aspect of cut-up is the accurate description of lesions, their size, shape, colour, and texture. Kerrie stated how these details serve the foundation for subsequent pathological examination.

The initial assessment of a skin lesion involves determining the lesion type (flat or raised) and its dimensions. Subsequently, the lesion's colour and overall appearance is described.



Kerrie methodically presented step-by-step procedures for the different skin specimens. Starting at skin punches and moving onto the more complex orientated skin excisions. She emphasized the importance of orientation, sectioning, and embedding, while also acknowledging the variability between laboratories and their requirements.



Kerrie also emphasized the importance of proper specimen storage, including the process for packaging and labelling left-over skin tissue to facilitate potential reconstruction if required.

She also gave special attention to "exceptions to the rule" skin excisions where melanoma is indicated in the

clinical notes. On these occasions, the whole skin excision is submitted.

Looking at Re-excision melanoma specimens, Kerrie noted that careful consultation of the patients' history was required for to determine how much to submit. As it isn't always straightforward, Kerrie reiterated that decisions are determined in a case-by-case scenario.

Kerrie stressed the necessity of clear communication and collaboration with registrars/pathologists. The use of notes and consultation with senior staff were recommended for complex or unclear cases.

Non-Complex Cut-up Overview – Kellie Vukovic

Kellie began by looking at the basic tools used for cutup, stating that the choice of instruments used were mostly guided by preference of each staff member. She then focused on different non-complex specimens from bone reamings to gall bladders that are commonly seen at Melbourne Pathology.

Bone Reamings

Kellie highlighted the importance of splitting fresh tissue, measuring the tissue, and using biopsy pads to avoid contamination. She also discusses the need to assess the need for decalcification and the different decalcification options available.

Nail Specimens

Considering the clinical notes was an important aspect to determine the appropriate handling of the specimen, particularly for fungal conditions and melanoma. Kellie outlined the need for softening the nail before processing. The use of Nair and potassium hydroxide for softening, noting the advantages and disadvantages of each method.

Dilation and Curettage (DNC) Specimens

For DNC specimens, the tissue is removed using a curette and is usually received in gauze fragments. Kellie describes the different volumes of tissue and their corresponding descriptions. The colour, measurement, and presence of mucoid material are also noted. The tissue is blocked in total to avoid contamination, and very scant tissue is sent to cytology for a cell block. All curette biopsies have three levels cut.

Products of Conception (POC)

We looked at importance of noting the presence of chorionic villi, villous vessels, and foetal parts, and sampling the tissue for testing. Kellie outlined the specific requirements for cytogenetics and histology testing, including the need to send fresh tissue to cytogenetics and the appropriate handling of the tissue for both tests. She discuss the macroscopic description and measurement of POC specimens, as well as the importance of identifying foetal parts and measuring the foot to determine the gestational age. If an intact foetus is received, it should be done by a registrar.

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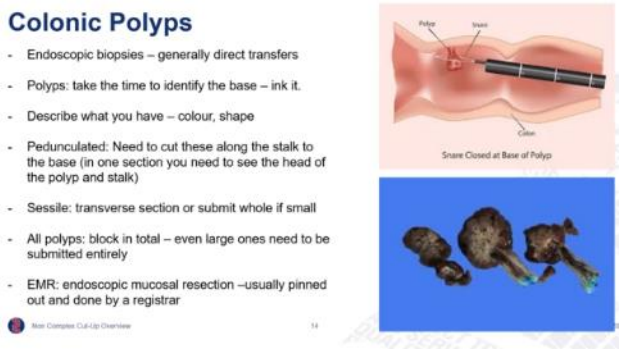
Vasectomy Specimens
During the surgery, the vas deferens, which carry sperm, are cut and sealed. In the lab, the vas deferens are received in separate jars and measured for length and diameter. The tissue is inked before cutting to identify the lumen. The amount of dissection made are determined by the length of the vas deferens.

Cysts
There are different types of cysts, including epididymal, ovarian, tubal, and incidental cysts. The key to examining these cysts is to measure them in three dimensions, describe their external surface, and serially slice them to examine the cut surface. Kellie recommended using paper towels to prevent exposure to cyst contents. The macro description should include the thickness of the cyst wall, the appearance of the contents, any adhesions, and whether the cyst is single or multi-cystic. For smaller cysts, one to two blocks are sufficient, while larger cysts may require one block per centimetre.



Colonic Polyps
Accurate polyp examination is crucial for cancer diagnosis. Sessile and pedunculated polyps require careful measurement, description, and submission. Polyps less than 5mm can be submitted whole, while larger ones need to be sectioned. EMR specimens are often pinned out and require careful handling.

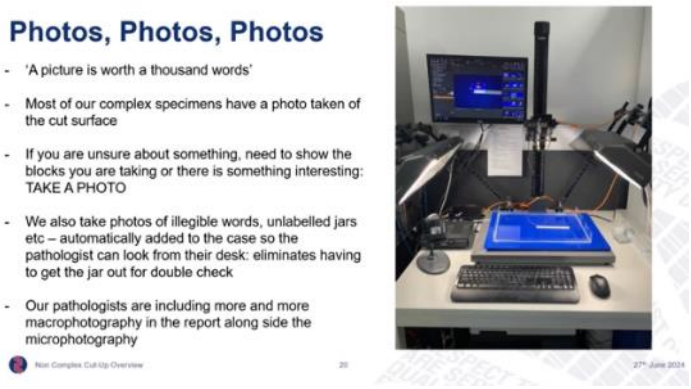
Lipomas
Lipomas are slow-growing fatty lumps, measure its dimensions and ink the external surface blue. Slice it into five-millimetre intervals and examine the cross-sectional appearance. Normal fat is bright yellow and homogeneous. Abnormal areas, such as dull yellow, pale tan fibrous areas, or red-white haemorrhagic areas, should be described and submitted to a registrar for further examination. If the specimen is small, process one representative cross section. If it's larger, process one block per centimetre up to a maximum of six blocks.

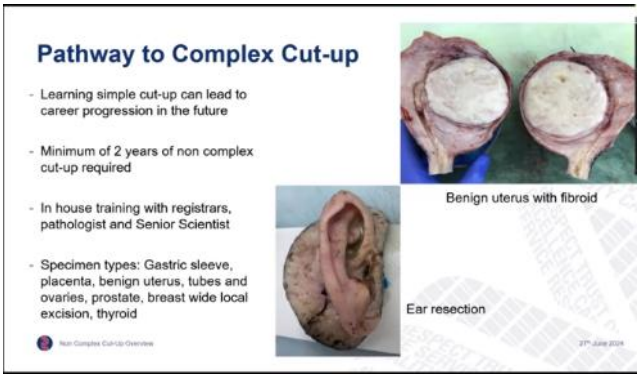
Appendix
When examining an appendix, it's crucial to measure its length, greatest diameter, and locate the base and tip. The tip may be difficult to find due to exudate or excess fat. The mesoappendix, or fat attached to the appendix, should also be described. The appendix should be cut longitudinally and transversely to examine its lumen and contents. The margin and inking of the base are important to show potential spread to the bowel mucosa. Carcinoid tumours are common in the distal portion of the appendix and should be closely inspected. If identifies they should be referred to a registrar. Standard appendix sections include a longitudinal section of the tip, a transverse section through the mid-body, and a transverse section of the base. Additional blocks may be submitted for abnormalities.

Gallbladder

It is crucial to note if it's open or closed, as this can indicate gallstones escaping during surgery. The gallbladder has three parts: the neck, body, and fundus. The cystic duct margin is usually stapled. Lymph nodes may be present near the neck. To examine the gallbladder, measure its length and diameter, open it longitudinally, and describe its appearance, including colour, texture, adhesions, nodules, lesions, polyps, wall thickness, cystic duct condition, and stones. Stones can vary in colour and size, with yellow stones being most common. Small stones can cause more pain than large ones. Lymph nodes and abnormal contacts should also be noted. Representative samples should be taken from the body and fundus, including the cystic duct margin. It's important to drain the gall bladder's contents back into the jar to avoid losing any polyps.

Beyond technical proficiency, Kellie underscored the importance of a holistic approach. Understanding the clinical context, recognizing potential pitfalls, and maintaining effective communication with pathologists are essential components of quality cut-up. The use of photography as a diagnostic tool was also emphasized, showcasing its potential to enhance communication and facilitate accurate interpretation.





Kellie also highlighted the value of specialised training in cut-up techniques. She emphasized the benefits of developing expertise in this area, including career advancement opportunities and increased job satisfaction.

She lastly mentioned some resources that can be helpful for learning more about cut-up, including the RCPA cut-up manual and two textbooks: Lester's Manual of Surgical Pathology and Surgical Pathology Dissection, an illustrated guide by William Wester and Associates.

https://www.rcpa.edu.au/Manuals/Macroscopic-Cut-Up-Manual

Thank you to both Kerrie and Kellie for their amazing overview of simple and non-complex cut up.

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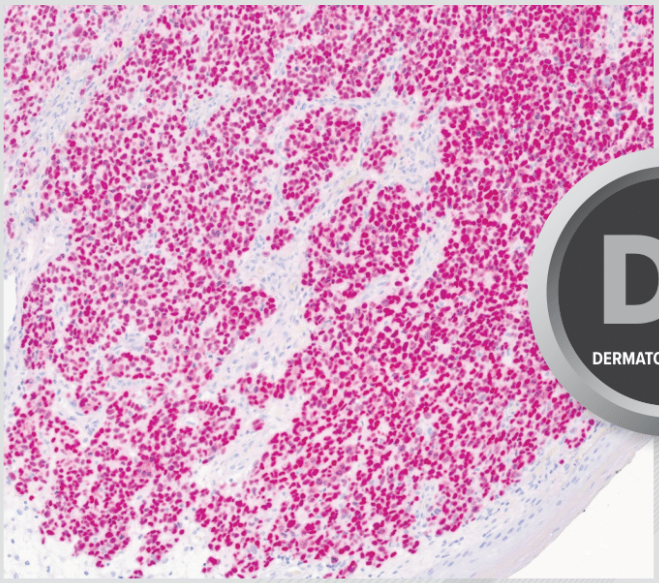

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10th National Histotechnology conference review By Christine Gorringe

The conference was held at Doltone House, Darling Island in Sydney. The venue was excellent, and conveniently located to accommodation options. The conference was organised by the Histotechnology Society of NSW and the Australasian Association of Histology and Histotechnology. A wide range of exhibitors were available in the exhibition area, and company representatives displayed a wide range of equipment, consumables and brochures (as well as the vitally important show bag items!)

The following review is based on my own notes, and I apologise for any discrepancies resulting from me not being able to read my own writing!

The theme of the conference was "Making a Difference". After a truly engaging and thought provoking Welcome to Country by Uncle Brendan Kerin, the conference began with

Advancing Education: Progress on the RCPA Cut-up Course

Rick Farquharson (Cutup Coordinator, DHM Pathology).

The working group is developing a surgical cut-up course for scientists. This will comprise the completion of modules, together with Pathology supervisions=, in-house training and an examination. "Grand-fathering" will for experienced cut-up scientists. The certification will be nationally recognised. It is hoped the course will be available by late 2025, early 2026.

Colonic Samples: from polypectomy to proctocolectomy

Michael Bushe-Jones (Senior Dissectionist, ACL, WA. RCPA Cut-up course Working Group Member)

This presentation covered removal techniques, optimal handling of specimens, histological findings and correct classification of findings.

Correct classification of polyps/lesions is essential for correct therapy and appropriate re-screening. The importance of the dissection, processing and embedding of colonic samples was highlighted as essential to achieving quality histological results.

Removal techniques were discussed including the minimally invasive techniques available, however after viewing those photos, I am not keen to see any of the "maximally invasive techniques! In keeping with the theme, the presentation finished with a charming photo of a bucket of poo!

The future is now, are you ready? Histology's Journey through Lean Workflows, Automation, AI and Human Expertise

Corinne Hill, Service Lead from Pathlab Bay of Plenty, NZ

Corrine shared her experience of Digital Pathology implementation in a paperless system. The availability of automated embedders (requiring more precise work at cut-up), and automated microtomes can further add efficiencies to Histology workflow.

Digital image scanners used for slide scanning create large file sizes, but allow Pathologist's to open a case from a screen, where they can access the request form, the digital images and a reporting template. NPAAC guidelines are available https://www.safetyandquality.gov.au/sites/default/files/2022-08/tier_4_requirements_for_the_use_of_digital_images_as_an_alternative_to_direct_microscopy.pdf. Another useful resource is the Leeds Guide to Digital Pathology,

Future areas of development will be around storage of data and safe sharing of data. The benefits of Digital AP include improved safety as Pathologist numbers decrease and decreasing scientific work to allow scientist's to focus on more complex tasks.

Muscle Biopsy histological technique in the evaluation of neuromuscular disease

Louie Berlin Cado (Chief Medical Technologist & Biosafety Officer – St Lukes Medical Center Global City)

Louie spoke on Duchenne Muscular Dystrophy occurs when patients lack the dystrophin protein, the X-linked form is the most severe. 95% of cases are diagnosed by genetic testing, with 5% unable to be diagnosed by genetic testing or genetic testing is not available, therefore muscle biopsy testing is important.

Correct handling of muscle biopsy specimens is essential, from the selection of biopsy site through to processing of specimens. An open or needle biopsy should be taken from clinically active or moderately involved muscle (MRC grade 3 or 4). Areas of trauma, muscle wasting, and tendon insertion should be avoided.

Testing for LM/IF/EM and enzyme IHC. Training of laboratory staff in the isopentane snap freezing of tissue is essential if specimens cannot be delivered to the testing lab within 4 hours.

Intersecting Horizons: The Convergence of Medical Research, Precision Medicine, Digital Pathology and Anatomical Pathology

Madeline Gough (Medical Scientist – Mater Pathology, QLD and PhD candidate)

This engaging and informative presentation is hard to summarise in a few sentences!

HER2 positivity in breast cancer is associated with increased morbidity and mortality. Cases scoring 2+ and 3+ are further tested for HER2 gene amplification-ISH. Patients with HER2 amplification have access to new therapies. There are new antibody-drug conjugates are available so accurate diagnosis and stratification is essential.

Of the 5 groups, groups 2,3 and 4 are the most difficult cases and up to 3 Pathologists can be involved in discordant counts. A study was conducted to look at intra/inter-observer variability. When variability is present a diagnostic algorithm (DAI) can improve this. This DAI uses a digital heatmap to guide the Pathologist to the areas of HER2 amplification. While LM is the gold standard, discordance has an impact on treatment options. In the most difficult group (2), DAI works best at improving discordance and improved diagnostic time by 66%.

Madeline then spoke on theranostics. Target molecules for cancer receptors/+linker/+payload. Can give an idea if a cytotoxic agent will assist if delivered straight to the receptor on a tumour cell. CDCP1 is expressed in a number of malignancies. It is increased in HER2+ and triple negative breast cancer, but not or minimally expressed in normal tissues. CDCP1 antibody bound to cytotoxic payload in triple negative breast cancer can cause cell death. No benefit was noted for co-targeting HER2 and CDCP1. CDCP1 also has the potential to target and detect lesions.

Beyond the Slides: Exploring Ancillary Allies in Histopathology

Dr Joanne Y. To (Anatomical Pathology Registrar – NSW Health Pathology)

This was a comprehensive review of ancillary testing and the advantages and limitations of each test. Testing covered included flow cytometry, Direct IF, Electron Microscopy, FISH, Karyotyping and NGS. It was an excellent review of tests that we share/prepare for other departments.

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Why Margins Matter – The Patient's Journey

Leah Simmons (Chairperson AAHH and HTSNSW)

Leah gave a very personal account of her own experience with Papillary Thyroid Cancer. It was amazing to hear her story from initial symptoms, eventual diagnosis, treatment and recovery. Leah is now 7 years cancer free and 6 months pregnant – congratulations! The key takeaway points were to acknowledge symptoms, request testing and how important what we do in Anatomical Pathology is for the patient.

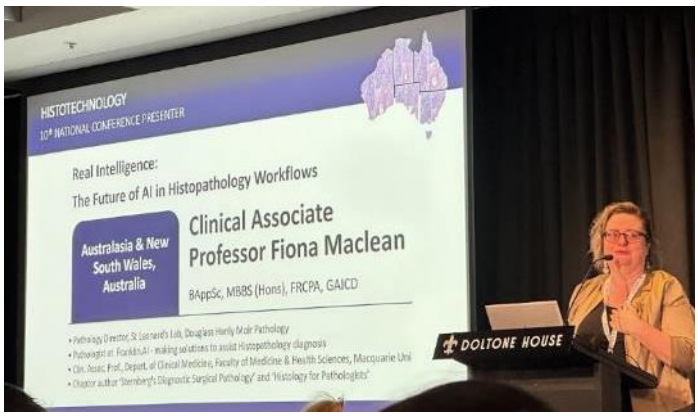
EQA makes a difference

Iris Xie spoke on behalf of Zenobia Haffajee

Highlighting the importance of risk management, and how all staff are responsible. Risk can be assessed by using a matrix to rate as low, medium, high and very high risk. EQA can be used to identify risks and provide information on whether assays are fit for purpose, provide assistance to improve poorly performing assays and to set targets for qualitative and quantitative assays.

Real Intelligence: The Future of AI in Histopathology Workflows

Clinical Associate Professor Fiona Maclean (Pathology Director, St Leonards Lab, DHM Pathology)



This presentation was both informative and entertaining. AI assistance tools (like ChatGPT) and AI agents or apps were discussed. LLMS can be used for a number of tasks, patient care summaries, letters writing, diagnostic information, screening and personal medicine. Challenges include; lack of contextual information, limited interpretation, ethical/legal issues, dependency and bias + error propagation.

There are lots of papers on AI n Pathology however an example if it's use is; we are expecting a tsunami of prostate cancer cases in the future. More than Pathologist's will be able to cope with. AI can lead to increased accuracy (detection, classification, quantification, segmentation). It can also increase effectiveness/productivity by creating workflow improvements (digital workflow, quality, prioritisation, IHC available earlier, pre-population of reports).

The final three presentations of the conference were more sit back and take it in. **Dr Sairita Maistry (Senior Forensic Pathologist, Forensic Medicine Sydney)** spoke on **Deciphering Clues: Unravelling Forensic Histology Cases**. Dr Maistry gave an overview of Forensic Pathology uses a multidisciplinary approach to determine cause, mechanism and manner of death. Histological examination is crucial as an ancillary investigation. Case study examples were given as to when Histology "cracked the case".

Cutting Edge Conversations: A Surgical Cutup Panel Q&A, was an engaging discussion on the topics of - the RCPA Scientific Surgical Cutup Course, AI in Histology and recognition of surgical cutup qualifications.

Finally, **Mark Bromley (Supervising Scientist, Anatomical Pathology, Princess Alexandra Hospital, QLD)** spoke on **Histopathology in the Congo**. Sonic have supported the building, equipping, staffing and training of a laboratory in Congo. Mark gave a personal account of the challenges faced in the initial setting up of the lab. He then gave a snapshot of how things have developed and what is happening now. It was great to hear about this voluntary and charitable that has been done to improve the health of people in one of the most difficult countries to live in the world.

Poster presentations covered a range of topics and were well presented and interesting to read. The catering was excellent, and the conference gala dinner was fun! An excellent conference – congratulations to everyone involved in its organisation.

10th National Conference Poster Winners

1st: A retrospective Audit of placentas submitted for histopathological examination
By: Kyra Lyell

2nd: Validation summary of Silver Methenamine Masson Trichrome (AgMT) stain using Bouin's solution for staining renal biopsies
By: Michelle Yeung

3rd: Utility of a Time-Modified Periodic acid Schiff fungi (PASF) Stain in Frozen sections for invasive fungal sinusitis: A case study
By: Vicki He

Left to Right: Kyra Lyell (Prince of Wales Hospital), Michelle Yeung (Royal Melbourne Hospital) & Vicki He (Prince of Wales Hospital).

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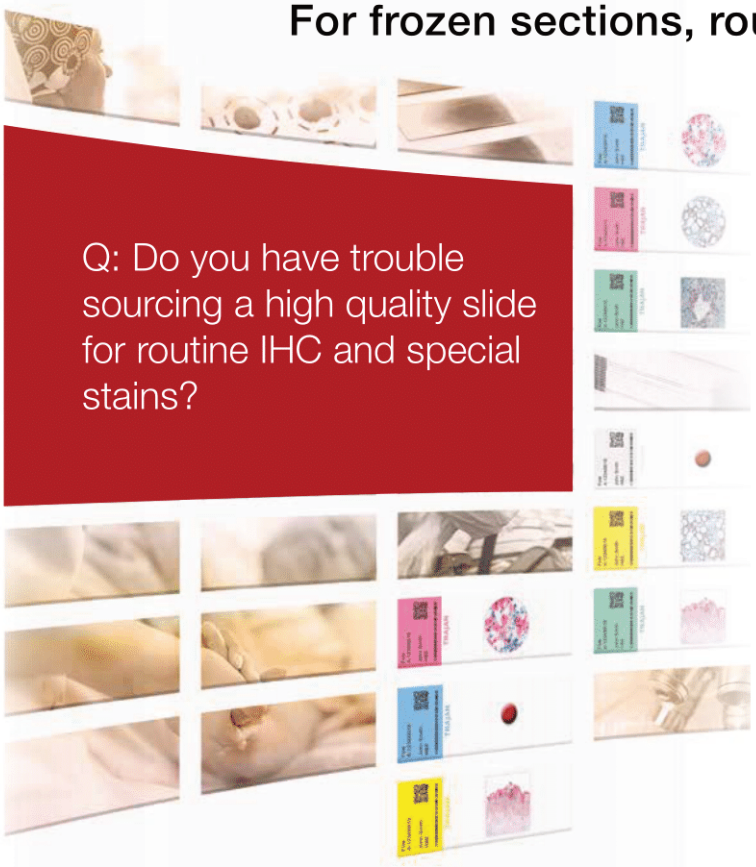

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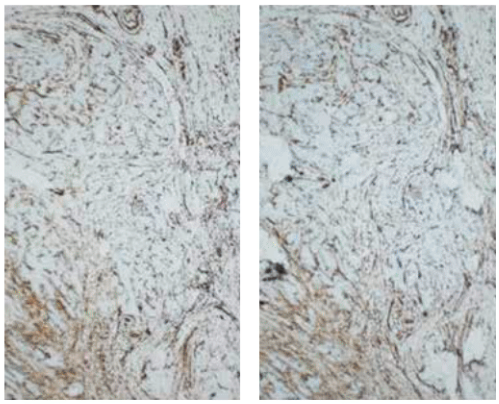

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Article Review | Elizabeth Baranyai

Comparative study of two reprocessing methods for formalin fixed paraffin embedded tissue

The article, titled "Comparative study of two reprocessing methods for formalin fixed paraffin embedded tissue," is a technical report published in the **Journal of Histotechnology**. Authored by Lunette et al., the study evaluates and compares the effectiveness, cost, and turnaround times of two tissue reprocessing techniques—Serial Xylene (SX) and Pat Dry (PD)—used on under-processed formalin-fixed paraffin-embedded (FFPE) tissue samples.

The study included 129 tissue samples from 40 clinical specimens. These samples were initially sectioned into three groups: a control group with standard thickness (3-5 mm) and two experimental groups cut at 10 mm thickness to simulate under-processing. Following initial processing and evaluation, the thicker samples were reprocessed using either the SX or PD methods. These samples were then re-evaluated by pathology residents for histological quality.

(1) **Serial Xylene (SX) method**: A FFPE tissue block is melted down and placed in serial xylene baths to remove the paraffin from the tissue. The tissue is then placed in a series of descending concentrations of ethanol from 100% to 70%, after which routine processing is repeated. This reprocessing method can be done either manually or by using an automated tissue processor [14]. If an automated tissue processor is used to remove paraffin, the tissue goes through the clean cycle programmed to skip the heated drying phase where heat could damage the tissue. After tissue processing is repeated, the sample is then re-embedded in paraffin, sectioned, and stained.

(2) **Pat Dry (PD) method**: A FFPE tissue block is melted down and the tissue is gently patted with gauze to remove excess paraffin. The tissue is then placed on the routine tissue processor starting at the formalin step without the need for additional xylene and dehydration steps. It is believed that a small amount of paraffin remains in the tissue and protects the portion of the tissue that is properly processed from additional exposure to dehy-drants and clearing agents i.e. `over-processing'. After reprocessing, the tissue is then re-embedded in paraffin, sectioned, and stained.

The reprocessing schedule is detailed in the table below:

Table 1. Routine automated tissue processing schedule.

Station	Solution	Time	Temperature	Vacuum/ Pressure	Mix
1	10% NBF[i]	30 min	40 C°	P/V	Slow
2	10% NBF	30 min	40 C°	P/V	Slow
3	70% Alcohol[ii]	20 min	40 C°	P/V	Slow
4	95% Alcohol[iii]	30 min	40 C°	P/V	Slow
5	95% Alcohol	35 min	40 C°	P/V	Slow
6	100% Alcohol[ii]	40 min	40 C°	P/V	Slow
7	100% Alcohol	40 min	40 C°	P/V	Slow
8	100% Alcohol	40 min	40 C°	P/V	Slow
9	Xylene[iv]	40 min	40 C°	P/V	Slow
10	Xylene	40 min	40 C°	P/V	Slow
11	Paraffin[v]	40 min	58 C°	P/V	Slow
12	Paraffin	40 min	58 C°	P/V	Slow
13	Paraffin	40 min	58 C°	P/V	Slow
14	Paraffin	40 min	58 C°	P/V	Slow

NBF[i] Neutral Buffered Formalin (245-685); 70% Alcohol[ii] made with 100% Alcohol[ii] (HistoPrep, #HC800); 95% Denatured Alcohol[iii] (#HC1100), Xylene[iv] (#X3P) all from Fisher Scientific, USA, and Paraffin[v] (#7052, Sakura Finetek, USA).

Key Findings

- **Effectiveness**: Both reprocessing methods significantly improved the quality of tissue sections compared to their initial states. The SX and PD methods showed similar improvements in quality scores and a reduction in slide rejection rates, suggesting both are effective in enhancing tissue quality for diagnostic purposes.
- **Efficiency**: The PD method was found to be significantly faster and easier to perform than the SX method. Average preparation times were 66 minutes for PD and 250 minutes for SX, contributing to quicker turnaround times for the PD method.
- **Cost**: The study included a cost analysis showing that the PD method was less expensive than the SX method. This was due to shorter preparation times and fewer reagents required for the PD method, making it more economical in a clinical setting.

Methodological Details

The study meticulously documented each step of the processing and reprocessing methods, including the types and concentrations of chemicals used, the equipment involved, and the specific protocols followed. This thorough detailing allows for reproducibility and provides a comprehensive view of the experimental setup.

Review and Critique

The study is well-organized and robust in its experimental design, focusing on a direct comparison between two prevalent reprocessing methods in histopathology. The inclusion of detailed cost and time analyses adds practical value, aiding pathology laboratories in making informed decisions about which method to implement based on efficiency and budget considerations.

Conclusion

The article contributes valuable insights into the optimization of tissue reprocessing in histopathology labs. Personally, I have only ever used the SX method, so it was interesting to read there is a viable alternative. It effectively demonstrates that while both the SX and PD methods enhance the quality of poorly processed tissues, the PD method offers advantages in terms of cost, time efficiency, and ease of use, making it a preferable option in many scenarios. Further research could expand on these findings by exploring the impact of these methods on other diagnostic procedures such as immunohistochemistry or molecular testing.

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MEETING NOTICE AND AGENDA
HISTOLOGY GROUP OF VICTORIA AND TASMANIA
ANNUAL GENERAL MEETING

Thursday 17th October 2024 @ 18:45

Join Zoom Meeting
https://us06web.zoom.us/j/88062245868?pwd=agr4eceSemlQ5u9VKOOXL3WjfMmxBi.1

Meeting ID: 880 6224 5868
Passcode: 539860

Meeting Open

1. **Minutes of previous AGM**
   Motion: To accept the minutes of AGM

2. **President's Report**

3. **Financial Report**
   Motion: To accept the 2023/2024

4. **Life Membership**
   Motion: To confer life membership to Kerrie Scott for services to the HGVT

5. **Election of office bearers and committee**

6. **General Business**

Meeting Closed

Scientific Meeting to follow

Org.No. A0035235F

Nomination Form
Histology Group of Victoria and Tasmania Committee

Name:_____

Institution of employment: _____

Email Address:_____

Position Nominated For: □ President □ Treasurer □ Secretary □ Committee Member
(Please tick box)

Nominations must have the consent of the nominee

Signature of Nominee: _____

Nominations must be returned at least 7 days prior to the date of the Annual General Meeting.

Please scan and email nomination form to secretary@hgvt.org.au

Future Events 2024

Org. No. A0035235F

Next Meeting

5th September 2024

HGVT Scientific meeting

Topic: Student Presentations

Raman Kaur – "Case of a Vietnam Veteran"

Jules Yonterng – "Going simple"

Ana Garcia Landeira - "Squiggly things"

Date: 17th Oct 2024

HGVT Scientific meeting

Topic: AGM and IHC (New Antibodies and Problematic Ones)

Presenters: TBA