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PARAFFINALIA

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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:

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Please feel free to contact any of the committee members listed above with any comments or suggestions. Contributions are always welcome.

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Blurb from the Bush

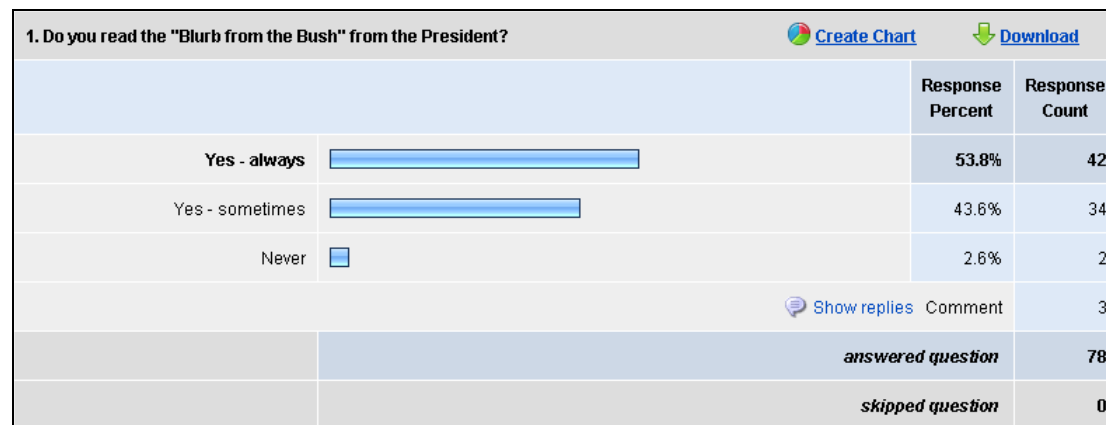
Thankyou to all those members that responded to the newsletter survey. We had 14% of members respond. Interestingly most of the respondents did so from the email communication of the survey, with over 33% responding, whilst only 7% of those without email communication responded to the prompt in the newsletter. The results of the survey are below. The committee have decided to progress towards electronic delivery of your newsletter. This will take effect from the August edition. To date 15% of members have requested to receive the newsletter electronically.



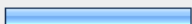
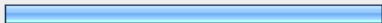


The May scientific meeting was well attended with members of both the HGV and ASC supporting the presentations. Our next meeting is at the Victorian Institute of Forensic Medicine. This should be very interesting and will involve a tour of the facility.







The trivia night is approaching and now is the time to get thinking about your tables. Last year was completely sold out so don't be tardy.






The committee together with the South Australian Histology group are undertaking to organise another Coonawarra conference on the Labour Day weekend next year. This is always a popular conference targeting both further education and plenty of social networking amongst the vines. Look out for advertising in future editions.

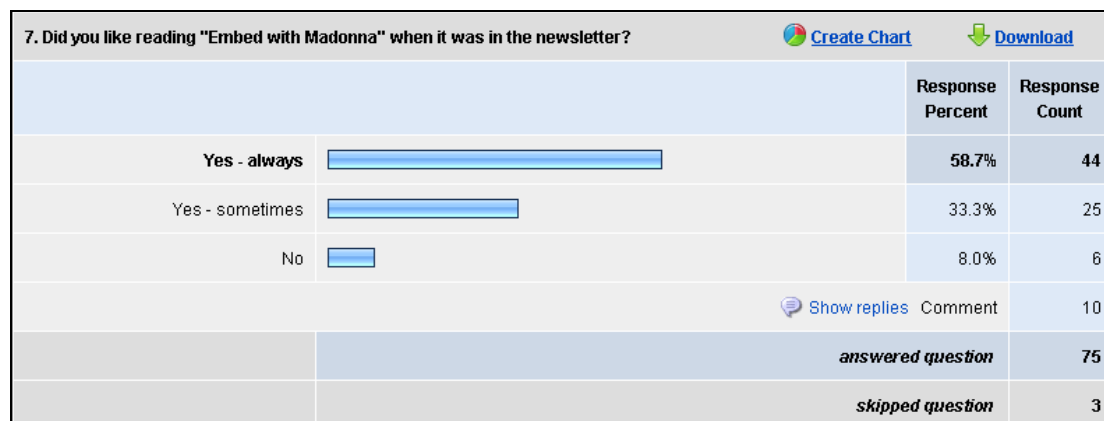
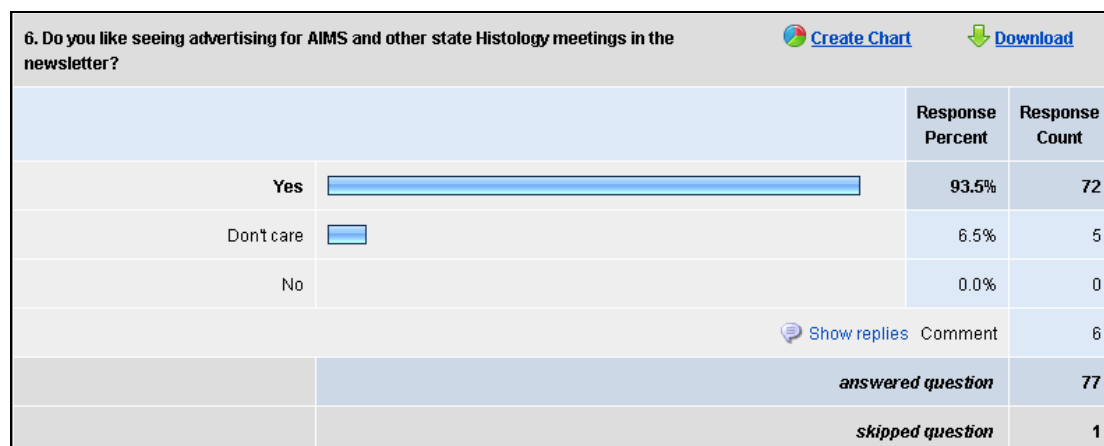
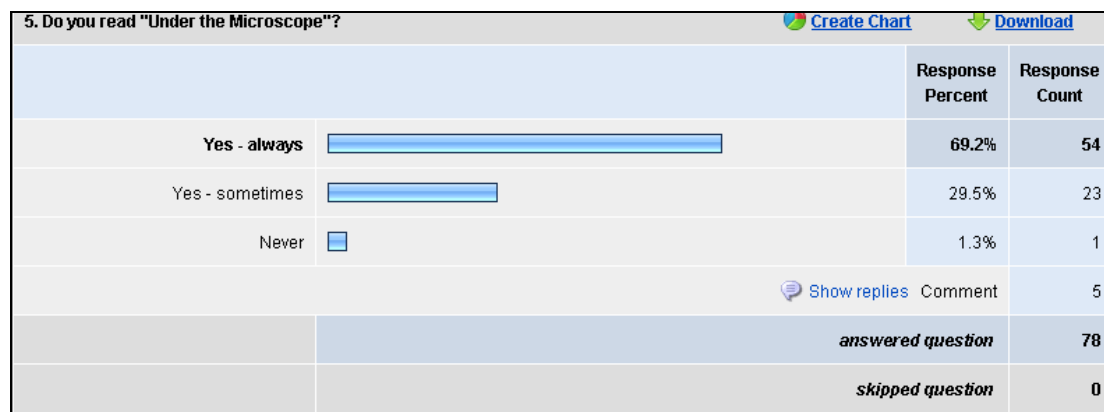
Adrian Warmington
HGV President











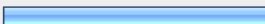
2. Do you read the article reviews?			 Create Chart	 Download
		Response Percent	Response Count	
Yes - always		32.5%	25	
Yes - sometimes		66.2%	51	
Never		1.3%	1	
			 Show replies Comment	4
			answered question	77
			skipped question	1







3. What do you think of the amount of advertising generally?			 Create Chart	 Download
		Response Percent	Response Count	
Too much		6.5%	5	
OK		92.2%	71	
Too little		1.3%	1	
			 Show replies Comment	4
			answered question	77
			skipped question	1

4. How do you feel about advertising being in the newsletter?			 Create Chart	 Download
		Response Percent	Response Count	
Prefer it was not present		0.0%	0	
Dont mind if it is there or not		60.5%	46	
Prefer that it was present		39.5%	30	
			 Show replies Comment	6
			answered question	76
			skipped question	2



8. Would you like to see our newsletter sent electronically or do you prefer a hardcopy?			 Create Chart	 Download
		Response Percent	Response Count	
Electronically		55.4%	41	
Hard Copy		44.6%	33	
		 Show replies Comment	18	
		answered question	74	
		skipped question	4	

9. If you preferred electronic newsletters and this meant due to the size of the file that you did not receive the trade advertising, how would you feel?			 Create Chart	 Download
		Response Percent	Response Count	
Still happy to go electronic		54.0%	34	
Would prefer hard copy		46.0%	29	
		answered question	63	
		skipped question	15	

10. Currently there are 5-6 editions annually. What do you think would be an ideal number?			 Create Chart	 Download
		Response Percent	Response Count	
Zero		0.0%	0	
One - Three		1.3%	1	
Four - Six		84.6%	66	
Seven - Nine		14.1%	11	
		 Show replies Comment	10	
		answered question	78	
		skipped question	0	

Under the Microscope

Reported by Maria Chavez

**Ms. Jean Mitchell
Laboratory Manager
Neuromuscular dept. University of Wisconsin hospital and Clinics**

1. What was your first job?

I was a waitress at a small town restaurant. I was 15 and worked nights and weekends. The pay was horrible but it kept me out of some teenage mischief.

2. What attracted you to Histology?

I had never heard of histology until I went to interview at a hospital for a medical technologist internship (in the U.S. that would be blood bank, bacteriology, microbiology, etc) and included in the literature was information on their histology internship. Ended up I thought the histology internship (12 months of on the job training) was more interesting; applied and was accepted the following year. The rest is histology history.....

3. What is the worst decision you have ever made?

Can't say that I have a "worst" decision. I have always felt I make the best decision possible with the circumstances at the moment of that decision. Although - I do regret the poor decision of eating a large bag of peanut M&M's in the middle of the night (has happened on a few occasions.....) and of course the time I painted my bathroom pink.

4. What is the best decision you have ever made?

Returning to college when I was in my 40's. I needed to complete the educational pursuit that I had started years and years ago.

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

It would have to be Barack Obama. He fascinates me. His outlook on life; his love of family; his unconventional upbringing; his great laugh; his intelligence; his ability to maintain composure in stressful situations. He would be an incredible person to sit and have a beer with.

6. What music do you enjoy listening to?

I enjoy a variety of music but my all time favourite would be Jimmy Buffett (naturally - with a margarita in hand)

7. What is your favourite stain?

Being a muscle person it would have to be the one-step Gomori trichrome. If you only had one stain to diagnosis a muscle biopsy with it – it would be hands down the trichrome.

8. What is your favourite food/Restaurant?

Italian and probably Scoozy Restaurant in Chicago. You can do so much with pasta. It can be an appetizer, a salad, an entrée, a dessert – you can't lose with pasta.

9. What are you reading at the moment?

The Accidental Tourist by Anne Tyler. I loved the quirky movie and I found the book in a sale bin recently – it is quite hilarious.

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

I have never been to a bad conference but one of my all time favourites was in 2001 (right after 9/11) coming to Australia and speaking at the NSW meeting in Mudgee. The world was in a bit of turmoil and I found Mudgee surrounded by its vineyards the perfect place to be at that time.

11. Are there any current projects you are working on at the moment?

A few things up in the air at the moment. I am a chair person for NSH and am gearing up for our national meeting in Seattle; I am currently organizing a regional histology conference for 2011; and a couple of publications in the works.

Meeting Reports:

A combined Histology and Cytology Student Presentation was held on the 6th May.

Two cytology case studies were presented: “Acinic View” by Jessica Lees and “Haematuria: Not a Wee Problem” by Alexandra Liassos.

“Acinic View”

Jessica presented a well illustrated case of Acinic Cell Carcinoma, presenting in a 21 year old male. Clinically there was a solid mass in the left Parotid gland and the clinical notes queried a tumour or enlarged lymph node. A Fine Needle Aspirate was performed.

Cytological examination of the prepared smears revealed a cellular aspirate, of bland, monomorphic groups of cells with foamy cytoplasm. A feature of these cells was fine red granules identified in the cytoplasm.

As the cells did not appear lymphoid in origin, Jessica discussed the epithelial differential diagnoses for this tumour including Oncocytic neoplasm, Warthins tumour, Adenocarcinoma, Mucoepidermoid Carcinoma and Acinic Cell Carcinoma. A final diagnosis of Acinic Cell Carcinoma was reached based on the cytological findings and clinical presentation. Histology confirmed the cytological diagnosis and reported the presence of tumour in the excised tissues. The histology sections showed a mix of both well and poorly differentiated components to the tumour. Interestingly the Fine Needle Aspirate only sampled the well differentiated component of the lesion, illustrating the sampling limitations inherent in the procedure.

The prognosis for this patient was reported by Jessica to be favourable.

“Haematuria: Not a Wee Problem”

Alexandra presented a detailed case study from an 83 year old female who presented clinically with Haematuria, Dysuria and weight loss. A pelvic ultrasound was performed, identifying a bladder mass, endometrial mass and a distended Gallbladder. A series of Urine cytology was requested.

The prepared slides were highly cellular with a complex picture of necrotic debris and blood in the background. Numerous hyperchromatic, epithelial cells were present singly and in glandular like groups. Cell in cell engulfment was also noted. The cytological conclusion was of carcinoma possibly a high grade Urothelial Carcinoma or metastases from another site such as the genital tract. Further investigations were recommended.

Cytological examination of a concomitant plural effusion showed similar features to the urine cytology. Metastatic disease was confirmed but what was the primary tumour?

At this point Alexandra discussed the possible differential diagnoses, including Transitional Cell Carcinoma, Renal Cell Carcinoma, Endometrial Carcinoma, Melanoma and Lymphoma. As an endometrial mass was identified at ultrasound, uterine curettings were taken and sent to Histology. Sections identified the presence of Adenocarcinoma with endometroid characteristics.

A Transurethral resection of the suspected bladder tumour identified a poorly differentiated carcinoma.

A final diagnosis was reached, Grade 3 primary Endometrial Adenocarcinoma with metastasis to the bladder via direct extension. Alexandra explained how the patient declined any aggressive treatment, unfortunately the patient died one month after diagnosis.

Reported by Joanne Buhagiar
Melbourne Pathology

Histology presentations

The Liver That Makes You Quiver – Megan de Koning (The Royal Children’s Hospital)

Clinical Notes: 15 year old boy; weight loss; change in behaviour; tremors; depression; trouble speaking; mild jaundice (particularly in the sclera of the eye); palpable liver; bruises and spider naevi.

Initial diagnosis based on clinical notes → **Wilson’s disease:** a genetic disorder whereby the body is unable to excrete excess copper; due to a mutation on the ATP7B gene on chromosome 13 (responsible for the manufacture of a copper transport protein which enables copper to incorporate into ceruloplasmin and be transported out of the liver); copper starts accumulating at the beginning of life, however, symptoms are not evident until adolescence when the amount of copper has reached dangerous levels in the body; the liver is the first and most prominent organ to be affected by excess copper, but if the disease is left to progress,

copper will deposit in the brain and will lead to a variety of neurological symptoms. If left untreated, Wilson's disease will lead to organ damage and death.

Histology Section: Diffuse steatosis (fatty change) and nodular cirrhosis; glycogenated nuclei; necrosis; lipofuscin; Mallory bodies.

Special stains chosen to support preliminary diagnosis:

Shikata's Orcein: Positive for copper

Pearl's Stain: Positive - iron laden kupffer cells

PAS: Positive – glycogenated nuclei highlighted

PAS + diastase: Negative

Reticulin Stain: Highlighted the collapsed reticulin network which occurs in the latter stages of the disease.

Final Diagnosis: Wilson's Disease: Confirmation of the disease is usually through assessing both the clinical history of the patient along with other laboratory findings which show: decreased serum ceruloplasmin levels; increased urinary copper concentration; Kayser-Fleischer rings around the iris of the eye; Rhodanine stain; genetic testing; hepatic copper content - gold standard ($\geq 250 \mu\text{g}$ of copper per gram of dry liver tissue is enough to confirm the disease; normal levels are $\leq 50 \mu\text{g/g}$).

Treatment: Removal of copper and prevention of its re-accumulation through chelation therapy; Metallothionein inducer drugs (contain zinc which blocks the absorption of copper in the intestinal tract); low copper diet; liver transplant if liver damage is severe and irreparable.

Reported by Michelle Zammit (The Alfred Hospital)

The Fungi Files:

Presented By: Kellie Vukovic

Peter MacCallum Cancer Centre

Clinical Notes:

A 40 year old female in the late stages of AIDS presented with fever, chills, fatigue, weight loss, muscle aches and sweating 3 weeks before her death. She also presented with heart palpitations, chest pains, shortness of breath and coughing.

Salivary Gland:

The glands are found in and around the mouth and throat. The major salivary glands are the parotid, submandibular and sublingual glands. Their purpose is to secrete saliva into the mouth.

A H&E of the salivary gland was performed and it showed very pale staining of septate hyphae 3-4 μm and branching at 45° angles.

Based on the morphological features present, the following stains were chosen:
Gram stain, Grocott Methenamine Silver (GMS), PAS, Wade-Fite, Ziehl-Neelson (ZN)

Results of Special Stains:

Special Stain	Results
Gram	Negative
GMS	Positive
PAS	Positive
Wade – Fite	Negative
ZN	Negative

Results from the special stain panel confirm that there is a fungi organism present.

Differential Diagnosis:

Aspergillus	Candida
Septate Hyphae 3-4 µm	Septate Hyphae 3-5 µm
Branching at 45 ⁰ angles	Branching at 90 ⁰ angles
Fruiting heads in aerobic conditions	Yeast Spores

Aspergillus Species:

A normal healthy individual is not susceptible to Aspergillosis. It is purely an opportunistic infection. There are over 200 species and further testing is required to confirm type. It is the most commonly encountered genus of fungi found in the clinical laboratory. It is acquired by the inhalation of airborne spores.

People at Risk:

Organ transplant recipients; high dose corticosteroid therapy; congenital immunodeficiency; AIDS; people with already damaged lungs; those having undergone major surgery.

Prevention:

Immunocompromised people can be cared for in rooms under positive pressure; dust accumulation in a hospital environment should be prevented; maintenance of ventilation units.

Treatment:

Invasive Aspergillosis - several weeks of Amphotericin B; surgery; antifungal agents do not help people with allergic aspergillosis.

Conclusion:

A fungal infection with the most likely diagnosis being an *Aspergillus* species.

Reported by Nguyen-Hoang Nguyen
Peter MacCallum Cancer Centre

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More details available soon!

New Zealand Histology Conferences and Workshops 2010.

Hi Histo colleagues. Robyn Rae, your Histology SIG convenor, has asked me to give you all an update of what is happening in the NZ Histo world in 2010.

In September we have a full day programme of Histology at the NZ Institute annual general meeting and Conference at the Bay of Islands on Thursday the 26th of August.

This is the first time in recent years that we have had a significant number of Histology presentations at this conference. It is also good that they are on the same day.

Two of the presenters are from the UK. They will give cut up for Scientists presentations. Gordon McNair from the UK is a Chief Med Lab Scientist, lectures on cut up at the University of Ulster and is a Council member of the Institute of Biomedical Scientists. Carol Turnbull leads the cut up section of a large UK Hospital.

Both presenters will also lead a workshop on cut up for Med Lab Scientists at Lab Plus, Auckland City Hospital on Saturday the 21st of August. Details of this will be coming up soon on the NZIMLS website. This is a workshop designed to kick start a qualification in cut up for Scientists. A similar qualification has been available in the UK for the past eight years.

Also at the Bay of Islands Sonya Prasad from the RCPA will present on Quality Assurance. Natasha Caldwell and Tania Smith will also present on Post Graduate education and automated immuno machines. There is also space for proffered papers. If you would like to present please contact me. By sheer coincidence the Conference dinner is on Thursday night so a great opportunity to network. The venue is the Copthorne hotel, Bay of Islands.

The Annual Histo SIG is booked at the War Memorial Conference centre, Napier. This will be a one day SIG and the date is the 20th of November. Please start thinking about presentations. Send them on to me.

All in all we are going to have a busy year.

Workshop on cut up for Medical Laboratory Scientists. LabPlus. Auckland. 8.30am-4.00pm Sat 21st of August. Details to be announced on NZIMLS website. Numbers will be limited.

Histology presentations at the NZIMLS Conference Bay of Islands. Thursday 26th of August. Details soon on NZIMLS website.

Histology SIG. War memorial Conference centre, Napier. Saturday the 20th of November. Details to be announced soon on NZIMLS website.

Have fun,

Joe McDermott.

Forensics and Histology – a waste of time?

Presented By: Dr. Paul Bedford
(Forensic Pathologist at VIFM)

Date: Thursday 24th June, 2010

Time: 6:00 – 6:45 Refreshments
6:45 – 7:45 Presentation

Venue: **Plueckhahn Lecture Theatre**
*Enter at VIFM Reception. Lecture theatre
is located opposite
**Victorian Institute of Forensic
Medicine (VIFM)**
57 – 83 Kavanagh Street
Southbank 3006

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Future Scientific Meetings:

2010

~~19-20th March~~

~~One Day Seminar~~

~~Venue – St. Vincent's Hospital, Melbourne~~

~~6th May~~

~~HGV/ASC Scientific Meeting – Student Presentations~~

~~Venue – PeterMac~~

24th June

Scientific Meeting – Forensics and Histology – a waste of time?

Presented By: Dr Paul Bedford (Forensic Pathologist)

Venue – Victorian Institute of Forensic Medicine (VIFM) **

** Please note that the above scientific meeting is not held at Peter Mac

23th July

Social Event – Trivia Night

Venue – TBA

9th September

Scientific Meeting – Renal Biopsies

Speaker - Professor John Dowling

Venue - PeterMac

11th November

Scientific Meeting - AGM

Venue – PeterMac

Trivia Night

**Friday 23rd July
2010**

7pm – 11pm



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\$25 per person or \$250 per table.

(inc finger food, Drinks extra)

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Who am I?

The rich List?

Musical challenge & More.

Chance for bonus points.

Prizes

Full payment must accompany this form. Payment will not be accepted on the night. No exceptions!!! Seats are limited, so book early to avoid disappointment. RSVP & payment due Monday 19th July. Contact Maria Chavez 8786 8835.

Please make cheque or money order to HGV Inc.

Return this section with payment and send to: 39 Viewgrand Drive, Berwick 3806.

Contact NameContact number.....

Institution/s.....Number of seats.....

Enclosed is a remittance for \$.....