



Histology Group of Victoria Inc.

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*Editor: Neil O'Callaghan*

*"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."*

# PAPRAEFTNALLA

# **Committee Page:**

The members of the Histology Group of Victoria 2007-2008 committee are:

<b>Name</b>	<b>Institution</b>	<b>Phone</b>
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Brincat, Judy	Dorevitch Pathology	9244 0354
Campfield, Sue	Austin Hospital	9496 5467
Chavez, Maria	Monash Medical Centre	9594 3493
Davies, Simon	Leica Biosystems	9211 7400
Nguyen-Hoang, Nguyen	Peter MacCallum Cancer Centre	9656 1844
O'Callaghan, Neil	TissuPath	9815 1588
Phefley, Sean	Victorian Cytology Services	9250 0300
Skehan, Cameron	Monash Medical Centre	9594 3493
Warmington, Adrian	St John of God Pathology (East)	5320 1171

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

## **Advertising:**

All enquiries for advertising in the next edition, please contact:

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[trade@hgv.org.au](mailto:trade@hgv.org.au)

Ph: (03) 98151588

Fax: (03) 9819 9250

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- Double Sided A4 Black and White \$325
- Color Insert (Supplied by company) \$325

**PLEASE DO NOT POST ADVERTISEMENTS TO  
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## **Submissions:**

Author enquiries and readers wishing to contribute articles or reports can contact the Editor –

Neil O'Callaghan (98151588), email: [editor@hgv.org.au](mailto:editor@hgv.org.au) or post directly to

The Histology Group of Victoria Inc.

P.O. Box 1461

Collingwood

Victoria 3066

Australia

Please send articles on floppy-disc (preferably Microsoft Word format) for inclusion in the next edition.

All articles submitted for publication will then become the sole property of the Histology Group of Victoria

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# **From The Chair: A Blurb from the Bush**

This is the last edition of Paraffinalia under our current 2007/2008 committee. Thanks to the marvellous efforts of Neil O'Callaghan in his first year as editor in putting together the editions this year. Thank you to all the committee members; some first timers, others for more years than I have digits; for their voluntary work in ensuring that the HGV continues to evolve and provide quality continuing education. The development of forums for discussion of issues not only pertaining to Histology, but also medical science in general is one of the evolving achievements that the committee is keen to see develop over the next few years.

Online forums are an area too, which the HGV is new. We have developed Histochat online and have promoted more opportunity to all members to have your say through Paraffinalia. We will continue to promote these forums as a means of engaging our membership.

Our scientific program has been well attended again this year, with the highlight being the cut-up workshop. Next year sees Adelaide host the 4<sup>th</sup> National Histology Conference, and we encourage you all to try to get to Adelaide in May for this meeting. Registrations are now available online [www.nhc.org.au](http://www.nhc.org.au)



The AIMS national meeting is upon us and has been a challenge for the HGV led by Judy Brincat, to provide an excellent program of speakers, a frozen section workshop and of course the highlight the Histology social dinner (open to everyone – don't need to be a delegate). Whilst registration to the main event is expensive compared to Histology national conferences or HGV one-day seminars, the workshop and dinner both provide excellent value.

Our last scientific meeting is on November 13<sup>th</sup> and is combined with the AGM. Anybody wishing to offer his or her services on the HGV committee, your input would be greatly appreciated, so please consider a nomination.

Adrian Warmington  
HGV President

## **Have Your Say:**

The HGV would love to hear from you and let you have your say! Email your thoughts to [editor@hgv.org.au](mailto:editor@hgv.org.au) along with your name or pseudonym, as we would like to publish some of your issues or responses in our forth coming editions. Or pose a question, what would you would like see discussed.

**Editor**

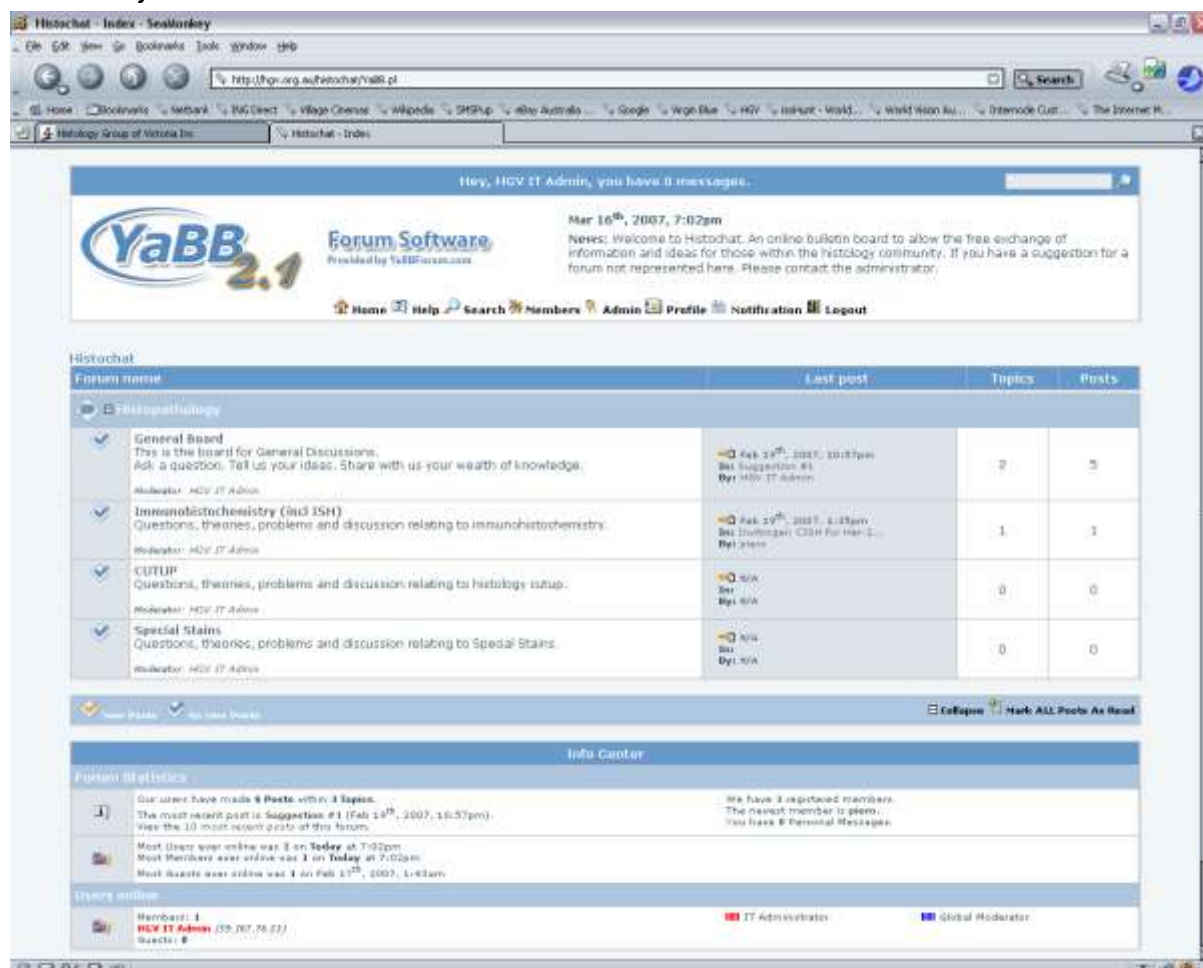
# HistoChat:

HGV Inc. has introduced a bulletin board style discussion forum to their website - [www.hgv.org.au](http://www.hgv.org.au). We hope this bulletin board "HistoChat" will become a forum for the open exchange of information and ideas within the histology community.

Registration is required, as is email authentication, to access *HistoChat*. No subscription fees are required and email addresses are used for correspondence and verification only. Registration is open to all. Students and junior staff are encouraged to participate. Free email clients such as hotmail may treat your authentication email as SPAM or JUNK MAIL, please check these folders if your authentication email does not arrive promptly. Authentication email needs to be responded to within 24 hours of registration. To those with online forum experience navigation should be relatively straight forward.

For those who need a little guidance YaBB have put together a step by step guide at [www.yabbforum.com](http://www.yabbforum.com). Click on the "**Get Support**" link then click on "**Yabb Integrated Help**" There's no direct link on our web site as Yabb block direct linking to their help pages.

*The forum layout is shown below:*



There are a few broad forum topics. It's up to you to expand on them, ask questions, answer questions or just tell us your ideas. You can even upload images to assist with your discussions.

*Sean Phefley, HGV IT Support*

# Scientific Review:

## KRAS TESTING

**Why tissue blocks from patients with colorectal cancer are being requested for KRAS testing.**

A recent major advance in the treatment of colorectal cancer has been the introduction of anti-EGFR antibodies. Recent clinical trials have established that the success of anti-EGFR antibodies is dependent on the *KRAS* mutation status of the tumour. Consequently, patients cannot get anti-EGFR antibodies without first being tested for *KRAS* mutations.

*KRAS* is a gene that mediates a signalling cascade that is often involved in the development and progression of cancer. There are a number of mutations reported in the *KRAS* gene that activate the signalling pathway.

If a *KRAS* mutation is found in the tumour, the patient will not respond to anti-EGFR therapy since *KRAS* proliferative signalling is downstream of EGFR and therefore blocking of EGFR signalling will not have any effect. It has now been made compulsory to mutation test tumour tissue from patients being considered for anti-EGFR therapy since patients with tumours with mutant *KRAS* will not respond.

It is essential to access tumour tissue from archival blocks in a **timely** manner to enable mutation testing to proceed.

This news item is put forward to request the assistance of all Pathology Laboratories to facilitate accessing tumour tissue for testing. Thank you in advance for your prompt assistance with any requests you may get.

Testing in Victoria is done by Molecular Pathology at the Peter MacCallum Cancer Centre. For further information, please contact [www.kras-info.com](http://www.kras-info.com).

Alexander Dobrovic  
PhD Head  
Molecular Pathology Research & Development  
Department of Pathology  
Peter MacCallum Cancer Centre

# Nomination Form for Election

## To the committee of Management

## Of The Histology Group of Victoria Inc



Histology Group of Victoria Inc.

Thursday 13<sup>th</sup> November 2008 Peter M<sup>A</sup>cCallum Cancer Centre

Nominated Person .....

Institution.....

Email Address.....

Position Nominated For

(please Tick Box)

President

☐

Treasurer

☐

Secretary

☐

Committee Member

☐

**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 Monday 27<sup>th</sup> October 2008**

Please send nomination form to:

The secretary  
Histology Group of Victoria  
PO Box 1461  
Collingwood  
VIC 3066



# The Women's:



the women's  
the royal women's hospital  
victoria australia

On Saturday the 21<sup>st</sup> June we moved the Anatomical Pathology lab at the Royal Women's Hospital (RWH). We are now located on corner of Flemington Road and Grattan Street and are now known as the RWH Parkville.

At RWH Parkville we are a physical part of the hospital. Our location is in an integral area that is easily accessible for Clinicians and other Hospital personnel. Our new accommodation is excellent. The pathologist offices' are to die for; windows with views. The laboratory and autopsy room gleam with stainless steel. The paintwork is cream and aubergine with pistachio cupboards. Not to

mention all of the gorgeous new equipment. John Foong has become an honorary member of the team as he has spent numerous hours tirelessly working with the move team, moving microscopes, packing up cryostats at one site and setting them up again.

Cleaning out the basement at Carlton was an unforgettable experience. From a historical perspective it was very interesting to view the postmortems which had been performed at the RWH since 1939. We were fortunate to obtain permission to archive the pre computer reports. Some difficult decisions are now being made within the departments of both RCH and RWH concerning the length of time that we keep blocks and slides. The costs of storage are immense and are an ongoing issue for hospitals and pathology providers throughout the world.



It is a new time now for Laboratory Services at the Royal Children's Hospital which provides services to the Royal Women's Hospital. Now that we have successfully designed, planned, moved and are working in the new RWH we are not at all phased by the current planning for the new RCH. As we say around here – 'Onwards and Upwards'.

The efforts and good will of all involved has been immense. Experiencing the camaraderie that comes with such an enterprise is truly special and we have grown as a team because of it.

***Dominique Davidson***



# Meeting Review:

## **Surgical Cut – Up of Gallbladders:**

**Presented by: Dr Andrew Ryan (Tissupath)**

**Reported By: Nguyen Nguyen (Peter MacCallum Cancer Centre)**

The gallbladder sits in the right upper quadrant, beneath the liver. It is connected by the common bile duct and drains out to the duodenum. The gallbladder is a storage place for bile and aids in the digestive process. It's generally removed for chronic cholecystitis with cholelithiasis, tumours (which are often unknown) and the removal is usually performed as laparoscopic procedure.

### **Describing the Gall Bladder at Cut Up:**

1. Measure the length and maximum diameter
2. Describe the serosa. For example:
  - Smooth and shiny (this means normal)
  - Previously opened
  - Purulent exudate
  - Hemorrhagic areas, perforation, colour
3. Slice the gall bladder along its length
4. Describe the mucosa and contents. For example:
  - Tan/green and velvety (this means normal)
  - Rough
  - Speckled Yellow
5. If there is the presence of calculi, describe:
  - Colour
  - Size
  - Type and quantity
6. Record if stones are present within the cystic duct
7. Record thickness of the wall
8. Also be on the look for:
  - Intramural stones
  - Cystic duct lymph node
  - Perforation
  - Polyps
  - Unusual foci (could it be possible tumour?)

### **Cutting the Gall Bladder at Cut Up:**

1. Submit slice from tip (longitudinal)
2. Submit transverse slice from mid body
3. Submit transverse slice from cystic duct (resection margin)
  - Include cystic node if present
4. Submit slices from macroscopically abnormal areas
5. ensure slices are taken to facilitate embedding on edge
6. DO NOT include calculi or gravel

### **Gall Bladder Diagnosis:**

Diagnosis of the gall bladder is often **cholecystitis**, which can be acute or chronic, however it can also be **carcinoma**, for which the pathologist must determine a **primary** or **metastatic** carcinoma.



# AIMS National Meeting 13<sup>th</sup> to 17 October 2008

**HURRY LAST CHANCE!!!**

## Histology Content

For full program see <http://www.aims2008.com/>

Prof Karen Burg (45 min)

### **Histology**

Prof Donald Metcalf (30 min)

Judy Brincat (30 min)

Mr Piero Nelva (30 min)

Dr Maria Sarris (30 min)

Ms Kate Taylor (30 min)

Ms Sue Campfield (30 min)

Ms Georgia Stamaratis (30 min)

Dr Jacqueline Boyd (30 min)

Dr Sarsha Collett

Ms Penelope Whippy (30 min)

Dr Anne K Voss (30 min)

Ms Dominique Davidson (30 min)

Prof David Finkelstein (30 min)

Prof Karen Burg (30 min)

Dr Janine Danks (30 min)

Ms Vicky Schiavon (30 min)

### **Cytology**

Ms D Reich (30 min)

Ms Dominique Davidson (30 min)

Mr Stuart Dobson (30 min)

### Biomedical Engineering

Using Mouse Models to Understand How Myeloid Leukaemia Develops  
Angioimmunoblastic T cell lymphoma

IHC

Stem Cell Markers in Ocular Tissue

The Histologist's Role in Industry R&D

Liver Transplantation

Sarcomas and FISH

Practicing Medicine in Developing Countries

CT Scanning & its applications to Autopsy

Myelin Reviewed - A New Look at an old Pal

The Genetic Regulation of Cerebral Cortex Development

Hydatidiform Moles: an Update

Histology & Research: Alzheimer's, Parkinson's & Brain Repair

Engineered Tissues: Challenges in Histology

Innovation in Histopathology Teaching

Meeting the Challenge

Review of Thyroid FNA Cytology

Searching for Placental Clues / Retinoblastoma in an Eye Wash

The ThinPrep® Imaging System - An Automated Approach to Cervical Cytology

**Don't miss the Frozen Section Workshop**

**“Racing into the Future”**

HGV/AIMS Workshop  
Thursday 16<sup>th</sup> October, 1.30pm  
Aikenhead Wing, St Vincent’s Hospital

**Trouble Shooting Frozen Sections**

**Cryostat Maintenance**

*Alex Laslowski*  
Anatomical Pathology  
Monash Medical Centre

**On-Site Frozen Sections**

Focus on Ice Crystal Artefact

*Maria Chavez*  
Anatomical Pathology  
Monash Medical Centre

**Off-Site Frozen Sections**

*Atha Palios*  
Anatomical Pathology  
St Vincent’s Hospital

**Frozen Sections for  
Moh’s Surgery**

*Clyde Riley*  
Baker IDI Heart and Diabetes Institute

**Cost: \$80.00**

**TO REGISTER: Follow these steps.**

[www.aims2008.com](http://www.aims2008.com)

Select “Registration”

Select “Register now”

Complete the contact details section.

Scroll down to “Workshops”

Scroll to “Thursday 13.30 – 17.00”

Select “St Vincents”

Select “Histology- Trouble shooting Frozen Sections”

Scroll down to “Payment Details” and complete.

Submit

Registrations close Thursday 9<sup>th</sup> October



AIMS 2008 NATIONAL SCIENTIFIC MEETING "Racing into the Future"

**HISTOLOGY DINNER**

Hosted by the Histology Group of Victoria Inc.

Sponsored by Arthur Bailey Surgico

WEDNESDAY 15<sup>TH</sup> OCTOBER 7.00PM

**Kri Kri Mezethopoleion  
39-41 Little Bourke St  
Melbourne  
9639 3444**

**\$50 per person all inclusive**

Name:.....

Address:.....

.....

Phone:.....

E-mail:.....

Number attending:.....

Make cheque or money order payable to:  
**The Histology Group of Victoria Inc.**

Mail to:  
**HGV**  
PO Box 2226  
Ringwood North  
Vic 3134

Or  
Direct deposit  
Account name: Histology Group of Victoria Inc  
Branch: St Vincent's Hospital Victoria  
BSB No: 063449  
Account No: 10065881

**PLEASE INCLUDE YOUR NAME**

# **Article Review:**

## ***Cervical cytology: will it ever be possible to cease screening?***

Jennifer Gillett - *The Biomedical Scientist*, September 2008, 771 – 772.

Introduction of the NHS Cervical Screening Programme (NHSCSP) in the UK in 1988 has had a significant impact on the death rate from cervical cancer, reducing it to 50% of the level before this date.

Recent changes to the NHSCSP include no longer screening women under the age of 25, reducing the frequency of screening women between the ages of 25 and 49 to once every 3 years and those from 50 to 64 to 5 years, and the introduction of liquid-based cytology.

However, the mortality rate has plateaued, due to a fairly low sensitivity of conventional screening (50 – 70%) and difficulties in population coverage. It is thought that the sensitivity is primarily affected by incorrect sampling of the lesion and in some cases a failure to detect abnormalities in smears. Population coverage is likely to be due to ethnic/religious reasons, the unpleasant procedure and the occasional instance of bad press.

A recent study has shown that molecular testing for HPV is more sensitive than cytology for primary screening. It also showed that it could provide at least 6 years protection from moderate cervical intraepithelial neoplasia and more severe lesions after a negative HPV result. This is compared to three years of reliable protection following a negative smear result.

A number of potential roles for HPV testing are outlined, including the clearly established role in triage of women with borderline and low-grade lesions, and as a primary screening tool. The major disadvantage of using HPV testing as a triage tool is that the high positive rate will mean a large proportion of women being sent for further investigation. Primary screening using HPV testing may be viable in older women, but younger women are more likely to have a transient infection and false-positive rates are also greater in younger women.

An alternative option is presented – HPV testing could be used as a primary screening tool with HPV-positive women being referred for cytology screening. It is suggested that this would be a reasonably cost-effective method, but that the major issue would be managing women with HPV-positive/cytology-negative samples. The recommendation given is that it would be sensible to retest at one year, given that most transient infections would have resolved.

The article concludes that HPV testing could “play a very important role in increasing the efficiency and accuracy of screening” but that cervical cytology will remain an integral part of any screening programme.

*Simon Davies*  
*Leica Biosystems*

# Meeting Review:

## H&E Quality Assurance Program

### WHO ARE WE TO JUDGE?

**Presented by:** Sonya Prasad (Technical Manager)

Erin Little (Quality Representative)

**Reported by:** Nguyen Nguyen (Peter MacCallum Cancer Centre)

The Royal College of Pathologists Australasia (RCPA) QAP commenced in 1988 and its aim was to provide an external proficiency testing, quality assessment and appropriate education program.

The program was designed to assist laboratories in meeting accreditation requirements (NATA). This enabled laboratories in both public and private industries, to regularly evaluate their diagnostic and technical performance and ensure the accuracy of the patient results they provide.

There are two modules for Anatomical Pathology: **Diagnostic** and **Technical** Modules.

**Diagnostic Module:** Diagnostic proficiency testing for pathologists and continuing education material e.g. diagnosis required on slides sent from the RCPA QAP

**Technical Module:** Allows laboratories to regularly evaluate their technical performance and it provides technical updates in areas of deficiency e.g. unstained slides required to be stained for H&E, Immunohistochemistry etc. The slides are then assessed and results are then forwarded to the laboratory.

#### **TECHNICAL MODULE: H&E STAINING**

The H&E is the most widely used stain in histological diagnosis. Two unstained sections are sent to each laboratory and they are required to stain the slide within their routine staining procedure. The stained slide is returned and the technical committee of scientists evaluates the slides. The slide is then assessed for its staining quality and section presentation. Each committee member gives a total mark out of 5, which is then reported as an average.

#### **Assessment Results:**

Unsatisfactory	<2.5
Borderline	≥2.5 and <3.0
Satisfactory	≥3.0

#### **Assessment Criteria for H&E staining:**

##### **Staining Quality:**

- Effectively demonstrate nuclear membranes, nucleoli, chromatin of vesicular and hyperchromatic nuclei
- Definition of fine and coarse chromatin
- Effectively demonstrate all non-nuclear material e.g. cytoplasm, fine and dense connective tissue fibres, skeletal and smooth muscle and red blood cells
- Uniformity of staining across slide
- Absence of contaminants

##### **Section Preparation:**

- Coverslip placed centrally over the section
- Absence of excess mountant
- Absence of bubbles, artifacts from dehydration, clearing and mounting

# From The QAP:



## **QAP Turns 20!!**

It is the 20<sup>th</sup> Anniversary of the RCPA Quality Assurance Program this year as those who attended the recent HGV Presentation "Who Are We To Judge?" would attest.

The College of Pathologists of Australia was registered as a limited company in NSW in 1956. It later changed its name to the Royal College of Pathologists of Australasia (RCPA). The College has, since 1968, established voluntary surveys in chemical pathology, haematology, blood bank, microbiology and anatomical pathology. The quality assurance programs consisted of separate programs for each discipline of pathology and were operated independently of each other. In 1982 the College invited NATA to establish a joint voluntary program for the inspection and registration of medical laboratories. Accreditation would result in quality assurance and quality results. In 1985 a joint parliamentary committee recommended that the NATA/RCPA scheme become mandatory for laboratory accreditation. In 1996 the Commonwealth Government amended the Health Insurance Act mandating that Medicare benefits would only be payable on services provided by NATA/RCPA accredited laboratories. The quality assurance programs flourished in the mid 1980s and eventually grew so large and complex that in 1988 the College established RCPA Quality Assurance Programs Pty Limited to further develop and administer the internationally recognised programs. Visit our website [www.rcpaqap.com.au](http://www.rcpaqap.com.au) and follow the links to your field of interest.



**Program Committee Meeting (L to R Dr Glenn Francis, Dr Trevor Beer, Stephen Farish (statistician), Dr Jane Armes, Dr John Skinner, Dr Robyn Laurie, Dr Michael Aldred).**

## **IH08-2 Immunohistochemistry Assessment Meeting**

Well, in the last instalment we were just preparing for the IH08-2 Immunohistochemistry Assessment meeting. Those participating labs should have all received their results by now. Sonya Prasad, our Technical Manager, has been hard at work taking enquiries and helping participants improve their results for the second assessment, and we are strongly supported by our Fabulous Immunohistochemistry Committee of Scientists who assist with preparation and assessment of Surveys. It was noted that there has been a general improvement in the performance of ER overall since 2004 with unsatisfactory results now similar in proportion to the other breast markers PR and Her2 (around 20%). For the lymphoma markers (Cyclin D1 and Bcl 6) this exercise was poorly performed with significant proportion of participants assessed as unsatisfactory (39% and 29%). For SMA, overall this exercise was well performed with the majority of participants achieving satisfactory staining. For CD34, the proportion of unsatisfactory staining in this exercise was greater than the SMA (25% compared to 9%)

We are still in the process of providing links to images from past surveys including best performers and various interesting artefacts

Hunt down your QAP Folder in the laboratory to see how you scored!





The fab immuno committee hard at work!  
**TM08-2 Technical Assessment Meeting**



**Glenn Francis and Jim Brennan**

In June we assessed participants Alcian Blue-PAS staining (TM08-2) and once again we could not do it without our fantastic Technical committee of Scientists!

This exercise was well performed with the majority (79%) achieving a satisfactory outcome.

Laboratories with unsatisfactory staining of the test slide often obtained unsatisfactory or borderline mark on their own control slide and frequently, this was due to suboptimal material used as control material that failed to adequately demonstrate both Alcian blue and PAS staining. This will provide better positive colour identification that distinguishes between the two mucin stains. A few laboratories used controls only demonstrating the PAS component and in these cases, the Alcian blue staining was often weak. Over-staining with the counterstain was noted by the committee particularly with haematoxylin and it was of concern that this may interfere with the visibility of the positive Alcian Blue staining. Another common problem observed was high background staining with PAS (pink background). The committee indicated that this may have been caused by carry over of periodic acid (avoided by extended washing following oxidation) and/or the decomposition of Schiff's reagent.

#### **HGV Presentation "Who Are We to Judge"**

September 4<sup>th</sup> both myself and Sonya presented "Who are we to judge?" at the HGV Scientific Meeting. Although QA has been tarnished with the "Boring" brush in the past we gave those attending a brief insight into the inception of the company, what is it exactly that we do, why we do it, and then put everyone in the Hot Seat as assessors for a selection of H&E stained slides that were presented as scanned images from our Virtual Microscope.

#### **IH08-3 Assessment Meeting**

As I am writing this newsletter we are all still coming down from an adrenaline rush due to the recent IH08-3 Immunohistochemistry Assessment meeting. Your results are being entered, verified, checked, validated, verified, checked, validated ..... and with all going well will be posted out 31<sup>st</sup> October.

#### **TM08-3 Technical Survey – AB-PAS,/Sectioning Embedding and Processing exercise**

Your unstained sections of stomach and bowel have been sent out and you are all hard at work performing your ABPAS method and cutting sections of tissue processed in your lab

Author Erin Little

Strictly edited by Sonya and Margaret

Supported by Jeyanthi, Ann, and Pat

## **Registration Forms** **Now Online**

**[www.nhc.org.au](http://www.nhc.org.au)**





# **Meeting Report:**

**Presented by: Dr Andrew Ryan from Monash Medical Centre and TissuPath**

**Reported by: Nguyen Nguyen from Peter MacCallum Cancer Centre)**

The Brockhoff lecture theatre was filled with the hustle and bustle of people attending the Melanoma presentation by Dr. Andrew Ryan. The meeting was a great success as over 42 delegates attended his entertaining lecture.

Dr. Andrew Ryan opened his entertaining presentation by stating that melanoma is a malignant tumour of pigment cells called melanocytes, which are found predominantly in the skin, but also in the eye and bowel.

He then discussed and showed pictures of a normal skin and the different components that make up the skin.

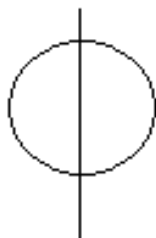
Exposure to UV radiation is one of the major contributors to the development of melanoma. Excessive amounts do damage the DNA of melanocytes by breaking DNA bonds, which cause mutations and as a result, causes uncontrollable growth. Intensity and duration of exposure to the sun and solariums are major factors in the development of melanoma.

Melanoma can present as moles or freckles. It's important to be aware of moles and look for change. Some methods that help in the early detection of melanoma are attending mole screen clinics which take photos that document change; general inspection of your own body and being aware of changing or new moles that appear.

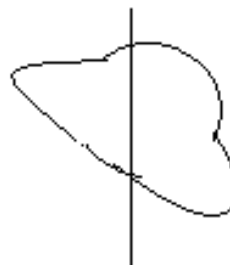
Dermatologists use a dermatoscope to look at skin lesions. The instrument magnifies skin lesions which enables them to see through the keratin layer and also the melanin distribution e.g. course, fine, granular etc.

Symmetry is important in classifying a lesion.

**BENIGN**



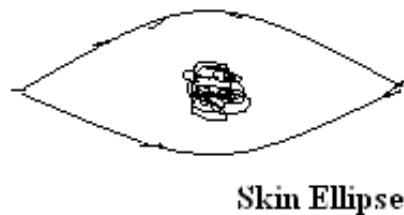
**MALIGNANT**



Clinicians will take skin specimens in the form of:

- Skin Shavings
- Skin punches
- Currettings
- Diagnostic Excision
- Re-excision with appropriate margin

Diagnostic excisions are preferred as the lesion is totally removed with an adequate ellipse of surrounding skin and tissue. Clinicians often excise skins in the shape of an ellipse due to cosmetic reasons, as the wound can be closed easier causing very little scarring.



When diagnosing melanoma, pathologists look for asymmetry in the lesion, colour variation and size in the histological section. They also look for melanocytes that are atypical in appearance.

The most common types of Melanoma in the skin are:

1. Superficial Spreading Melanoma
2. Lentigo Maligna (Melanoma)
3. Nodular Melanoma
4. Acral Lentiginous Melanoma

Malignant Melanoma occurs not only in the skin but also in the eye, the meninges (brain) and the small bowel (metastatic melanoma).

Melanoma is often difficult to diagnose because it's over represented in litigation cases. It is also difficult because of sampling issues, therefore cutting up and sectioning of the lesion is very important. Melanoma also has benign mimics therefore important to use immunohistochemistry to distinguish between benign and malignant lesions. The antibodies S100, HMB45 and Melan-A can all be used to prove the lesion is melanocytic. HMB45 is an activation marker used to prove the lesion is malignant rather than benign; Melan A is used to determine the lesion is melanocytic and S100 is the most sensitive marker for melanoma, however it is not specific as HMB45 and Melan-A.

Surgery is the primary therapy to prevent local recurrence. A complete surgical excision with adequate margins (1-2 cm) is done and this is called a wide local excision (WLE). Tumours spread to lymph nodes before spreading elsewhere and often sentinel lymph nodes (SLN) are the first nodes to be reached by metastatic cancer cells. SLN often arrive to pathology fresh, requesting for a frozen section, so if there is tumour present, then a further lymph node dissection may be performed during surgery. At paraffin sectioning, deep levels are performed to make sure there are no tumour cells present in all levels of the lymph node.

Malignant melanoma is curable if detected early. However, in the advanced stages of malignancy, chemotherapy (interferon) is used but has severe side effects and radiotherapy is done after surgical resection for locally advanced tumours.

# Future Scientific Meetings:

## 2008:

### 13<sup>th</sup> -17<sup>th</sup> October

AIMS National meeting Melbourne, including

**Early Bird Registrations 1/9/2008**

<http://www.aims2008.com/>

### 16<sup>th</sup> October

Frozen section Workshop

Venue: St Vincent's Hospital

**Early Bird Registrations 1/9/2008**

<http://www.aims2008.com/>

### 13<sup>th</sup> November

Scientific Meeting –peri –natal autopsy

Presenter: Dr Tiffany Symes

Venue- Peter Mac

Sponsor



### 12<sup>th</sup> December

HGV Xmas Party 2008

Mamma Vittoria Restaurant Fitzroy

RSVP by Dec 1<sup>st</sup>

Email [membership@hgv.org.au](mailto:membership@hgv.org.au)



Sponsor: **Speech Recognition Australia**

see our website [www.hgv.org.au](http://www.hgv.org.au) for pictures of Xmas 2007

## 2009:

### 8<sup>th</sup> - 10<sup>th</sup> May

4<sup>th</sup> National Histology Conference

Hosted by Histology Group of South Australia

**Early Bird Registrations**

[www.nhc.org.au](http://www.nhc.org.au)





## *HGV Christmas Party*

*on Friday 12<sup>th</sup> December*

*at Mamma Vittoria Restaurant  
343 Smith Street  
Fitzroy*

*at 7 pm*

*\$45 per person  
for a 3 course meal*

*RSVP and enquiries via email to [membership@hgv.org.au](mailto:membership@hgv.org.au)*

*RSVP by 1<sup>st</sup> December*

*Please include:*

- 1) your name*
- 2) contact number*
- 3) institution*
- 4) the number of people attending*

*(We will respond with confirmation and payment options)*

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**The Histology Group of South Australia**

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# Registration Forms Now Online

[www.nhc.org.au](http://www.nhc.org.au)

## Workshop 1

Dr. Craig James

Surgical Grossing Of  
Skin Specimens

## Workshop 2

Dr. John K C Chan

Immunohistochemistry -  
Technical And  
Interpretation Pitfalls

## Keynote Speakers

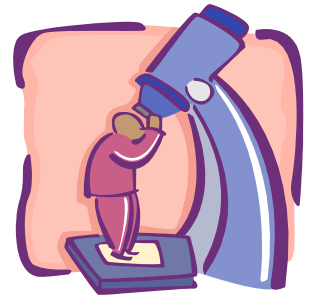
Dr J K C Chan – Immunogenetics Of Tumours,  
Achieving New Heights By Immunohistochemistry

Dr J Robin Warren – How A Lifetime's Work With Helicobacter  
Pylori Led To A Nobel Prize In Medicine

Friday 8 <sup>th</sup> May	10:00	Workshop 1
	13:00	Workshop 2
	18:30	Trade Opening with Cocktail Party
Saturday 9 <sup>th</sup> May	09:00 - 17:00	Plenary Sessions
	18:30	Pre-Dinner Drinks
	19:30	Conference Dinner
Sunday 10 <sup>th</sup> May	09:30	Plenary Sessions
	14:00	Finish With Late Lunch

# **Under the Microscope:**

*reported by Maria Chavez*



**Faye Kapoulitsas  
Chief Scientist  
Histology Department  
Dorevitch Pathology.**

## **1. What was your first job?**

I worked as a waitress at a restaurant in Fitzroy. I kept working there throughout my High School and University years. It taught me a lot about dealing with all sorts of different personalities as well as multi tasking. It was hard work but very rewarding. The only downside is that when I go out to dinner I am always subconsciously assessing the quality of the service!

## **2. What attracted you to Histology?**

I have always enjoyed the hands on aspect of working in Anatomical Pathology and feel that there is great satisfaction in the process of producing a histology section on a glass slide from any organ of the body.

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

Not entering the real estate market in the 90's.

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

Taking up a four year post as the Chief Scientist of Anatomical Pathology in a large public hospital in Dubai. Laboratory science knows no cultural or language boundaries.

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

CNN's chief international correspondent, Christiane Amanpour. She has interviewed most of the world's leaders and, in a way, it would be like having dinner with all of them as well!

## **6. What music do you enjoy listening to?**

I grew up in Greece so I have always enjoyed Greek music. I listen to a bit of everything really, and talk-back radio is my preferred option driving to and from work during the week.

## **7. What is your favourite stain?**

The humble H&E.

## **8. What is your favourite food/Restaurant?**

Thai food.

## **9. What are you reading at the moment?**

Bill Clinton's 'Giving: How each of us can change the world'

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

There are a few to choose from, but the 14<sup>th</sup> International Congress of Cytology in Amsterdam was a scientific and social highlight.

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

Trying to balance work with my personal life seems to be an ongoing project. My aim this coming summer is to spend as much of my free time as I can outdoors soaking up the sun.

# Histology Employment:

## G1 HISTOLOGY SCIENTIST/TECHNICIAN

A great opportunity to join a fast paced laboratory in a reputable, flexible and growing organisation. Due to continued growth, our leading Private Histology Practice is seeking experienced Grade 1 Histology Scientists/Technicians. Day and Night shifts available and job share considered. You will require extensive hands on experience in routine Histological techniques. Opportunities exist for the right candidates to expand their skills in area's of Immunohistochemistry and Cutup.

Send your application to Laboratory Manager, Mrs C. Cohen: [c.cohen@anatpath.com.au](mailto:c.cohen@anatpath.com.au) OR Anatpath, LPO Box 7216, Gardenvale Brighton, 3186

Check out our website [www.hgv.org.au](http://www.hgv.org.au) for jobs advertised all year round.

**Advertising here and on our website is FREE!**

Email [editor@hgv.org.au](mailto:editor@hgv.org.au) to advertise

# Histology Classifieds:

-----CAN YOU HELP?-----

A hospital lab being established in Cambodia needs old Sirokeen knife sharpening equipment. If you have a light box, knife holder or Ruby stone gathering dust in the back of a cupboard and would care to donate it for a good cause please contact Kathy McIntyre on 9890 7529 or 0400 946 052.

**Looking to sell old laboratory equipment ?**

**Looking to Buy second-hand gear ?**

**Advertise your requests here FREE!!**



# Would you like to get fast updates for Histology

- *Positions vacant*
- *Conference registration*
- *Scientific meeting reminders*

The HGV members email database is the way to go!

Simply email your name and email address to  
[membership@hgv.org.au](mailto:membership@hgv.org.au)

No trade or other advertising will come your way – strictly HGV or HGV sponsored events



## ***STRENGTH, HEALTH & FITNESS***

*with SOPHIE RUSSELL*

### SPRING – small changes reap huge results

Spring – new season, new diet strategy? Any diet works provided you stick to it. The problem with many of them is that they are impossible to stick to long term often because they exclude entire food groups, or are so energy light that if you do manage to follow them to the letter, you barely have the energy to lift the fork to your mouth. The upside of following a specific diet is that it forces you to focus on exactly what you are eating, how much and when, i.e. it forces you to be honest about what you are consuming. What am I insinuating? That we are a nation of liars? Uh-huh. You bet.

Are people endlessly thrusting moles under your noses once they discover what your work entails? In my line of business, the exercise scientist one, I am always hearing how “perfect” someone’s diet is but that they “lack the motivation to exercise”. Firstly, if you are 20kgs overweight and puff going upstairs, I’m guessing that there is some self denial as to the true quality of your diet. Secondly, motivation is an emotional state, ie it will only ever be a temporary condition and is therefore an unreliable incentive. If we only ever did things when motivated we would never achieve anything.

The key is to set some strategies in place that will see you succeed long term regardless of a new season, an impending big event or any other temporary target. In this vein, sticking to a specific diet and exercise

program can help to kick-start that change that you are seeking. However, motivation will not keep you on it. Believing in the change you are looking for, not losing sight of why you embarked on this plan in the first place and putting an end to all the excuses will help keep you on track.

As far as the exercise goes, this getting uncomfortable lark does not have to be for hours at a time. There is nothing magic about an hour. Little and often can work too. Here is an example of a practical and simple way of increasing daily energy expenditure without even leaving your lounge room.

We begin with some facts:

1. The average Aussie watches about three hours of television per day - mostly in the evening.
2. Every hour of commercial prime-time television is programmed with about fifteen minutes of advertisements. Forty five minutes of show, fifteen minutes of ads - with the ads typically being broken up into five three(ish) minutes blocks.
3. An individual who regularly watches TV from 7.30pm - 10.30pm (for example) will be subjected to approximately forty-five minutes of mind-numbing, ass-expanding ads every night.

A suggestion: how about using the 3 minute blocks to do something....? Imagine getting up and moving, for example, doing simple step-ups (stepping up and down on and off a 12inch/30cm block) during each of those ad breaks. Here are some staggering stats:

*(These are based on the person making no other change to their daily lifestyle and diet other than these step-ups)*

#### Example 1

**Weight of subject:** 150 lbs (68 kgs)

**Daily stepping commitment:** 15 x 3 mins

**Additional energy expended per day:** 552 cals

**Additional energy expended per year:** 201,480 cals

**Potential weight loss for the year:** 57.6 lbs (26.1 kgs)

#### Example 2

**Weight of subject:** 200 lbs (90.7 kgs)

**Daily stepping commitment:** 15 x 3 mins

**Additional energy expended per day:** 737 cals

**Additional energy expended per year:** 269,005 cals

**Potential weight loss for the year:** 76.9 lbs (34.9 kgs)

How's that then?! Quite a result.....

Needless to say it is highly unlikely anyone would do step ups every day for a year. However, this does illustrate the point that small, regular forms of exercise can bring about significant change. Similarly, by reducing your daily energy intake by 500kJ you will be at least ½ kg lighter in a month.

Hopefully you will consider this as you plot your next major body overhaul. The truth is ditch the excuses, stop plotting and just do something.

Get Spring-ing.....

# **Next Scientific Meeting:**



Histology Group of Victoria Inc.

Org. No. A0035235F

## **Peri-natal Autopsy: Principle and Practical Considerations**

**WARNING: This presentation will have graphical images that may offend**

<b>Speaker:</b>	Dr. Tiffany Symes Austin Health
<b>Date:</b>	Thursday, 13 <sup>th</sup> November 2008
<b>Time:</b>	6:00 – 6:45 Refreshments  6:45 – 7:30 Presentation
<b>Venue:</b>	Peter MacCallum Cancer Institute 7 St. Andrews Place East Melbourne
<b>Presentation:</b>	Brockhoff Lecture Theatre Level 3, Smorgan Family Building

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Attendance at this meeting contributes to APACE points

**WARNING: This presentation will have graphical images that may offend**