The guiding principle introduced in the REAL classification (1994) and 2001 WHO Classification (3rd edition) remains; that is, entities are defined by a combination of clinical, morphology, immunophenotype and genotype.

WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues (4th Edition) - Lymphoma Classification in the Third Millennium

Dr Debra Norris FRCPA

The long awaited update of the 2001 WHO lymphoma classification was released in 2008. This classification builds on the 2001 WHO classification and remains a collaborative effort between the American and European haematopathology societies, clinical advisory committees and more than 130 authors from more than 22 countries.
The guiding principle introduced in the REAL classification (1994) and 2001 WHO Classification (3rd edition) remains; that is, entities are defined by a combination of clinical, morphology, immunophenotype and genotype. The relevant importance of these features differs between different disease entities and no one ‘gold standard’ is recognised.

Advances and clarification of disease entities is included. Minor terminology changes are seen, reflecting advancement in knowledge, e.g., hepatosplenic T-cell lymphoma, whilst predominantly of gamma delta phenotype may occasionally be alpha beta. Systemic ALCL is separated into ALK+ and ALK- because of prognostic differences. Two studies have shown a tendency for ALCL, ALK- to differ genetically (in terms of chromosome losses or gains) from ALK+ and PTCL NOS, although overlapping features may be found.

Changes that readers will note include:

• The introduction of provisional borderline categories; incorporation of rare primary cutaneous T-cell lymphoma provisional entities taken from the WHO-EORTC consensus classification for cutaneous lymphoma (released 2005)
• The recognition of small clonal lymphoid populations, such as Monoclonal B-cell lymphocytosis, paediatric follicular hyperplasia with monoclonal B-cells
• Identification of diseases characterised by involvement of specific anatomic sites (e.g., Primary DLBCL of the CNS), or by other clinical features such as age (e.g., EBV+ DLBCL of the elderly; paediatric nodal marginal zone lymphoma) or clinical scenario (e.g., DLBCL associated with chronic inflammation).

There remain unresolved issues, and the classification will always be a work in progress, e.g., predictors of prognosis in FL, DLBCL and peripheral T-cell lymphomas. Separation of DLBCL into GCB versus ABC types by gene expression profiles clearly has prognostic importance. This, as yet, does not direct therapy. Nor can this separation be reliably reproduced by current routine morphology, immunophenotype and cytogenetic analysis; as such, this subtyping has not been incorporated in the current classification for everyday use.

Low Grade B-Cell Lymphomas:

The updated classification includes entities to emphasise that among the low grade B-cell lymphomas there are both age related and site related differences. In addition, an in situ lesion of FL has been recognised.

Both paediatric follicular and paediatric marginal zone lymphomas have been included as provisional entities, which tend to be localised and have an excellent prognosis. Paediatric FL typically lacks BCL2 expression and the t(14;18)(q32;q21) is absent. Similarly, prognosis of paediatric nodal MZL is excellent with low relapse rate and long survival after conservative treatment.

Primary intestinal FL typically occurs in the duodenum; most patients have localised disease (stage IE or IIE) and survival appears excellent, even without treatment. It would appear that intestinal homing receptors retain the clonal B-cells within the intestinal mucosa.

Primary cutaneous follicle centre lymphoma is a distinct lymphoma of neoplastic follicle centre cells, occurring on the head or trunk. This represents the most common type of cutaneous B-cell lymphoma and is distinct from nodal follicular lymphoma. Irrespective of growth pattern, the disease has an excellent prognosis with five year survival over 95%. Cutaneous relapses, seen in approximately 30% of patients do not indicate progressive disease.

Grading of follicular lymphoma has also been addressed. It is acknowledged in the updated classification that Grade 1 and Grade 2 FL have similar outcome, are not affected by aggressive therapy, and are not diagnostically reproducible; as such, the 2008 classification places these cases with few centroblasts as ‘FL Grade 1-2 (low grade)’. Stratifying Grade 3 FL is now mandatory, with FL Grade 3B more closely related to DLBCL on the molecular level. Also emphasised is that ANY area of DLBCL in any FL, receives a separate diagnosis of DLBCL, i.e., there is no such thing as FL Grade 3A with diffuse areas.

Provisional Borderline Categories:

B-cell lymphoma unclassifiable, with features intermediate between DLBCL and classical Hodgkin lymphoma

Over the last 20 years there has been acknowledgement of the morphologic and immunophenotypic overlap between CHL and some cases of DLBCL (usually primary mediastinal large B-cell lymphoma PMBL, and mediastinal nodular sclerosis subtype of classical Hodgkin lymphoma NSCHL). In the majority of cases, a specific diagnosis will be able to be made. However, there will be cases, typically involving young males with mediastinal disease, where both the morphology and immunophenotype exhibit transitional features between CHL and PMCL, e.g., CD45+, preservation of B-cell program, together with Hodgkin markers CD30 and CD15. In other cases that morphologically favour PMBL, the absence of CD20, expression of CD15 or EBV, would also favour this diagnosis. A close relationship between CHL and PMBL has been shown by gene expression profiling, but genomic studies of ‘grey zone’ or ‘borderline’ lymphomas are awaited. These lymphomas generally have a more aggressive clinical course and poorer outcome than either PMBL or CHL. There is no consensus on optimal therapy.

B-cell lymphoma unclassifiable with features intermediate between DLBCL and Burkitt lymphoma

Some of these lymphomas were previously classified as Burkitt-like lymphoma or atypical Burkitts. This terminology has been removed. The cases in this category may have morphological features intermediate between BL and DLBCL, and consistent BL immunophenotype; morphologically be more typical of BL but atypical immunophenotype; or genetic features that preclude a diagnosis of BL. Cases which are morphologically typical of DLBCL with a high proliferative index do NOT belong in this category; otherwise typical BL without demonstrable MYC rearrangement with characteristic immunophenotype are not in this category.

Many of the lymphomas in this category will be ‘double hit’ lymphomas, i.e., carry translocations of both MYC and BCL2. Gene profile studies of ‘double hit’ cases have shown that some of these cases have a profile intermediate between DLBCL and BL, whereas others are more similar to BL. Otherwise typical DLBCL with a MYC rearrangement are not included in this category. Conversely, lymphomas with an IG-MYC rearrangement as the sole abnormality likely represent BL even if morphologically atypical. These lymphomas are aggressive, with frequent BM, PB and CNS involvement, and resistant to current therapies.

continued page 4 >
### Table 1: WHO Classification of the Mature B-cell, T-cell, and NK-cell Neoplasms (2008)

<table>
<thead>
<tr>
<th>MATURE B-CELL NEOPLASMS</th>
<th>MATURE T-CELL AND NK-CELL NEOPLASMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic lymphocytic leukaemia/small lymphocytic lymphoma</td>
<td>T-cell prolymphocytic leukaemia</td>
</tr>
<tr>
<td>B-cell prolymphocytic leukaemia</td>
<td>T-cell large granular lymphocytic leukaemia</td>
</tr>
<tr>
<td>Splenic marginal zone lymphoma</td>
<td>Chronic lymphoproliferative disorder of NK cells*</td>
</tr>
<tr>
<td>Hairy cell leukaemia</td>
<td>Aggressive NK cell leukaemia</td>
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<tr>
<td>Splenic lymphoma/leukaemia, unclassifiable*</td>
<td>Systemic EBV+ T-cell lymphoproliferative disease of childhood</td>
</tr>
<tr>
<td>Splenic diffuse red pulp small B-cell lymphoma*</td>
<td>Hydro vacciniforme-like lymphoma</td>
</tr>
<tr>
<td>Hairy cell leukaemia-variant*</td>
<td>Adult T-cell leukaemia/lymphoma</td>
</tr>
<tr>
<td>Lymphoplasmacytic lymphoma</td>
<td>Extramedial NK/T-cell lymphoma, nasal type</td>
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<tr>
<td>Waldenström macroglobulinemia</td>
<td>Enteropathy-associated T-cell lymphoma</td>
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<tr>
<td>Heavy chain diseases</td>
<td>Hepatosplenic T-cell lymphoma</td>
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<tr>
<td>Alpha heavy chain disease</td>
<td>Subcutaneous panniculitis-like T-cell lymphoma</td>
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<tr>
<td>Gamma heavy chain disease</td>
<td>Mycosis fungoides</td>
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<tr>
<td>Mu heavy chain disease</td>
<td>Sézary syndrome</td>
</tr>
<tr>
<td>Plasma cell myeloma</td>
<td>Primary cutaneous CD30+ T-cell lymphoproliferative disorders</td>
</tr>
<tr>
<td>Solitary plasmacytoma of bone</td>
<td>Lymphomatoid papulosis</td>
</tr>
<tr>
<td>Extrasosseous plasmacytoma</td>
<td>Primary cutaneous anaplastic large cell lymphoma</td>
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<tr>
<td>Extramedial marginal zone lymphoma of mucosa-associated lymphoid tissue (MALT lymphoma)</td>
<td>Primary cutaneous gamma-delta T-cell lymphoma</td>
</tr>
<tr>
<td>Nodal marginal zone lymphoma</td>
<td>Primary cutaneous CD8+ aggressive epidermotropic cytotoxic T-cell lymphoma*</td>
</tr>
<tr>
<td>Paediatric nodal marginal zone lymphoma*</td>
<td>Primary cutaneous CD4+ small/medium T-cell lymphoma*</td>
</tr>
<tr>
<td>Follicular lymphoma</td>
<td>Peripheral T-cell lymphoma, NOS</td>
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<tr>
<td>Paediatric follicular lymphoma*</td>
<td>Angioimmunoblastic T-cell lymphoma</td>
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<tr>
<td>Primary cutaneous follicle centre lymphoma</td>
<td>Anaplastic large cell lymphoma</td>
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<tr>
<td>Mantle cell lymphoma</td>
<td>Anaplastic large cell lymphoma, ALK+</td>
</tr>
<tr>
<td>Diffuse large B-cell lymphoma (DLBCL), NOS</td>
<td>Anaplastic large cell lymphoma, ALK-*</td>
</tr>
<tr>
<td>T-cell/histiocyte rich large B-cell lymphoma</td>
<td><strong>HODGKIN LYMPHOMA</strong></td>
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<tr>
<td>Primary DLBCL of the CNS</td>
<td>Nodular lymphocyte-predominant Hodgkin lymphoma</td>
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<tr>
<td>Primary cutaneous DLBCL, leg type</td>
<td>Classical Hodgkin lymphoma</td>
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<tr>
<td>EBV+ DLBCL of the elderly*</td>
<td>Nodular sclerosis classical Hodgkin lymphoma</td>
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<tr>
<td>DLBCL associated with chronic inflammation</td>
<td>Lymphocyte-rich classical Hodgkin lymphoma</td>
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<tr>
<td>Lymphomatoid granulomatosis</td>
<td>Mixed cellularity classical Hodgkin lymphoma</td>
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<tr>
<td>Primary mediastinal (Thymic) large B-cell lymphoma</td>
<td>Lymphocyte-depleted classical Hodgkin lymphoma</td>
</tr>
<tr>
<td>Intravascular large B-cell lymphoma</td>
<td><strong>POST TRANSPLANTATION LYMPHOPLASISITATIVE DISORDERS (PTLD)</strong></td>
</tr>
<tr>
<td>ALK+ large B-cell lymphoma</td>
<td>Early lesions</td>
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<tr>
<td>Plasmablastic lymphoma</td>
<td>Plasmacytic hyperplasia</td>
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<tr>
<td>Large B-cell lymphoma arising in HHV8-associated multicentric Castleman disease</td>
<td>Infectious mononucleosis-like PTLD</td>
</tr>
<tr>
<td>Primary effusion lymphoma</td>
<td>Polymorphic PTLD</td>
</tr>
<tr>
<td>Burkitt lymphoma</td>
<td>Monomorphic PTLD (B- and T/NK-cell types)†</td>
</tr>
<tr>
<td>B-cell lymphoma, unclassifiable, with features intermediate between diffuse large B-cell lymphoma and Burkitt lymphoma</td>
<td>Classical Hodgkin lymphoma type PTLD †</td>
</tr>
<tr>
<td>B-cell lymphoma, unclassifiable, with features intermediate between diffuse large B-cell lymphoma and classical Hodgkin lymphoma</td>
<td></td>
</tr>
</tbody>
</table>

* Provisional entities for which the WHO Working Group felt there was insufficient evidence to recognize as distinct diseases at this time.

† These lesions are classified according to the leukaemia or lymphoma to which they correspond.

**EBV-positive DLBCL of the Elderly:**

EBV+ clonal B-cell proliferation occurring in patients >50 years without known immunodeficiency or prior lymphoma. Defined entities, such as plasmablastic lymphoma, lymphomatoid granulomatosis or DLBCL associated with chronic inflammation; primary effusion lymphoma, are excluded. In Asian countries this constitutes 8-10% of DLBCL. Data for Western countries is largely unknown. Approximately 70% of patients will present with extranodal disease. The clinical course is aggressive and median survival approximately two years and not predicted by IPI score¹.

**EBV-positive T-cell Lymphoproliferative Disorders of Childhood:**

Two new entities are included in the updated classification, reflecting two major types of EBV associated T-cell lymphoproliferative disorders reported in the paediatric age group. Both show geographic differences, occurring with increased frequency in Asians, Native Americans from Central and South America and Mexico. Hydroa vacciniforme-like lymphoma is a cutaneous lymphoma with an indolent clinical course, but with progression over many years. Systemic EBV+ T-cell lymphoproliferative disease of childhood has a fulminant clinical course, sharing overlapping clinical features with aggressive NK-cell leukemia. It may be associated with chronic active EBV infection or occur shortly after primary acute EBV infection. The association with primary EBV infection and the racial predisposition strongly suggest a genetic defect in host immune response to EBV¹.

**Conclusion:**

The updated 2008 lymphoma classification builds on the 2001 classification, benefiting clinicians involved in patient care, pathologists responsible for diagnosis and researchers alike⁵. We are indeed indebted to the driving force of the principle authors of this text and classification.

References:


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**Cutaneous CD30+ Lymphoproliferative Disorder showing the morphologic overlap between Lymphomatoid Papulosis and Cutaneous Anaplastic Large Cell Lymphoma.**

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**Pathologist Profile**

**Dr Debra Norris FRCPA**

**MEDICAL DIRECTOR AND PATHOLOGIST IN CHARGE: HISTOLOGY**

Graduating from the University of Queensland (MBBS Hons) (1984), Dr Norris trained in histopathology at the Mater and Princess Alexandra Hospitals, before obtaining a fellowship in pathology in 1994. She then took up a position as Staff Histopathologist at the Mater Hospital before joining QML Pathology in October 2002 as a Consultant Histopathologist at the Central Laboratory. In 1997, Dr Norris undertook a fellowship in haematopathology with world renowned authority Dr Nancy Harris at Massachusetts General Hospital.

Dr Norris areas of expertise are particularly in lymphoma (both nodal and extranodal including cutaneous), gastrointestinal pathology and dermatopathology. In these areas, she lectures widely and receives consultations.

Phone: (07) 3121 4429
Email: Debbie.Norris@qml.com.au
Throughout the year, QML Pathology has been very active in the field of Continuing Education. QML Pathology has hosted a high standard of education to the medical community in metro, rural and remote areas across Queensland and New South Wales.

Since its inception in 1992, QML Pathology’s Continuing Education program has relied on the expertise of our leading medical specialists and expert pathologists to present the most current and relevant developments to the medical community.

Over 2000 medical practitioners throughout Queensland and New South Wales have participated in accredited events hosted by QML Pathology in 2012. Our programs have received recognition from the medical community, as well as governing bodies, for delivering topical and varied education for General Practitioners (GPs), Practice Nurses and Specialists, as well as fulfilling accreditation criteria for respective colleges.

QML Pathology would like to thank our valued presenters and participants for their involvement throughout the year. We would also like to thank our event partners BD Diagnostics, Lilly, Boehringer Ingelheim and Sanofi Diabetes for their partnership and assistance in 2012.

To improve our delivery of education, we are constantly evaluating our activities. If you have any feedback to assist us in this, please do not hesitate to contact us at QML Pathology Marketing or e-mail directly jo.wilsonfarr@qml.com.au.

**CLINICAL AUDIT UPDATES**

Welcome to the end of another busy year for our Clinical Audits. As we are approaching the end of the GP RACGP Triennium (December 2013), GPs are reminded of our Cat 1 activities available to all medical practitioners. To register for any of our ongoing Audits, please contact your local Medical Liaison Officer or QML Pathology Marketing.

**SURGICAL SKIN AUDIT**

Diagnostic Accuracy (where the provisional diagnosis made by the referring doctor equalled the histological diagnosis for comparison) has remained at a very high standard and some very pleasing results overall is evident.

**CYTOLOGY PAP SMEAR AUDIT**

Once again we have very pleasing results for the Pap Smear Audit. Many clinicians are continuing to take part each month once completing their audit. Graphical statistics and positive HPV numbers have been greatly beneficial, according to feedback received.

Thank you to all participants, we look forward to another busy year in 2013 for the end of the GP Triennium.
Management of Women with Abnormal Cytology  Dr Jason Stone, Cytopathologist

The current management of women with abnormal cervical cytology is based on the NHMRC approved guidelines 2005. A lot has developed since the 2005 guidelines including our increased understanding of HPV biology, the introduction of the HPV vaccine, role of HPV testing and the increased uptake of liquid-based cytology.

This guidance is currently under review (the ‘National Cervical Screening Program Renewal’). The review will ensure that all Australian women have access to a screening program based on the latest evidence and best practice. The first meetings of the Renewal were in November 2011 and the process is expected to be completed by mid 2014.

This is a summary of the current management guidelines.

Low-grade squamous abnormalities

This category incorporates the subgroups of CIN1, HPV infection and atypical squamous changes that fall short of CIN1. The risk for disease progression is the same for all of these subgroups hence all are managed the same.

Most of these findings are due to a transient HPV infection which is likely to spontaneously regress within 8 to 16 months. The aim of the guidelines are to detect the small proportion which do not regress and go on to become persistent HPV infection, whilst simultaneously not over treating the vast majority not needing any medical intervention.

- **Women with a smear report of low-grade squamous abnormality should have a repeat smear at 12 months.**
- **If the repeat smear at 12 months again shows low-grade squamous abnormality, the woman should be referred for colposcopy.**
- **If the 12 month repeat smear is normal, the woman should have a further smear in 12 months, i.e., 24 months after the index smear. If this second repeat is normal, she can return to the routine screening interval.**

Fluctuating low-grade squamous abnormalities may indicate persistent HPV infection, hence the next management guideline:

- **Referral for colposcopy should be considered for a woman with fluctuating low-grade squamous reports, i.e., two in a three year timeframe, regardless of intervening normal cytology reports.**

Most women over 30 have cleared their HPV infection. This age group also has a higher incidence of squamous cervical carcinoma. Therefore an index smear report of low-grade squamous abnormality, especially without the reassuring history of a negative smear in the preceding two to three years, may portend either a persistent HPV infection or a higher grade lesion.

- **Women over 30 years who have not had a negative Pap smear within the preceding 2-3 years, may be offered immediate colposcopy or a repeat smear in 6 months.**

Interestingly, 20-25% of patients with a Pap smear report of low-grade squamous abnormality have a concurrent histological diagnosis of a high-grade squamous lesion. This ostensibly concerning figure is reproduced around the world regardless of the quality of the smear taker or reporting laboratory. In the Australian context, the risk of invasive cancer developing in the one year interval before repeat testing is exceptionally low and insufficient to warrant different management. The current review of the screening program will be assessing the potential role of HPV testing of low-grade smears as a means of triaging which have high risk HPV infection and may require different management.

High-grade squamous abnormalities

A woman with a Pap smear report of possible high-grade squamous lesion or high-grade squamous lesion should be referred for colposcopy.

If there is a report of a definite or a possible invasive component, the woman should be referred to a specialist gynaecologist, ideally within two weeks.

Glandular lesions

All glandular abnormalities are recommended to have colposcopic assessment:

- **A woman with a Pap smear report of possible high-grade glandular lesion or endocervical adenocarcinoma in situ (AIS) should be referred to a specialist gynaecologist.**
- **A woman with a Pap smear report of adenocarcinoma (of any origin) should be referred to a specialist gynaecologist.**

Follow up of women previously treated for high-grade disease

Follow up of treated high grade disease requires colposcopy and repeat smear at 4-6 months after treatment.

At 12 months, a further repeat smear and HPV testing is carried out.

- **Once a woman has tested negative to both HPV testing and cervical cytology on two consecutive occasions, i.e., 12 months apart, she can return to the normal screening interval rather than continuing annual Pap smears.**

This is the only use of HPV testing that is currently Medicare rebatable.

Conclusion

It is important to remember that the cervical smear is only a screening test, and patients should be aware that it has a small, unpreventable, incidence of false positives and false negatives. The best way for a woman to reduce her odds of getting cervical cancer is regular Pap smears and to attend any prescribed follow up smears.
Dr. Jason Stone  MBChB FRCPath FRCPA  
Consultant Histopathologist & Cytopathologist  
Phone: (07) 3121 4426  Email: DrJason.Stone@qml.com.au

After graduating with a Bachelor of Medicine and Bachelor of Surgery in 1997 from the University of Cape Town, South Africa, where he received multiple academic prizes, Dr. Jason Stone continued his internship and clinical rotations at Greys Hospital Pietermaritzburg, South Africa.

In 2000, Dr. Stone went to the UK and worked in the Department of Physiology and Histology at Bristol University. He commenced his histopathology training in Sheffield where he handled a wide range of general surgical specimens, including non-gynaecological cytopathology.

Dr. Stone joined Doncaster and Bassetlaw Hospital as a Consulting Pathologist in 2006, and in 2010 moved to Australia and joined the QML Pathology Brisbane histology and cytology team.

In addition to his work at the Brisbane Laboratory, Dr. Stone also oversees histology and cytology for the Mackay region.

Special Interests: Breast and gynaecological pathology, and cytopathology.

Dr. Bryan Knight  BSc (anatomy) MB ChB MMed (anatomical pathology) FIAC ACAP PhD

We would like to take this opportunity to thank Dr Knight for his contribution as the Head of Department of Cytopathology. Dr Knight will be continuing on with QML Pathology as a cytopathologist.

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Cytopathology training programme

Many doctors are not aware that the QML Pathology Cytopathology Department has a very successful in-house training programme that has been running since 1995. The programme includes screening of gynaecologic specimens (pap smears) and non-gynaecologic specimens. Since 1995 we have trained 54 graduates to screen gynaecologic and non-gynaecologic specimens.

It takes approximately 6 to 8 months to fully train a candidate to screen cervical pap smears, and most screeners take over two years to become competent in screening all of the various non-gynaecologic specimens, such as urines, sputa, Fine Needle Aspirates etc. The training programme involves a formalised series of lectures, multi-header microscope sessions, theory questions, slide screening sets and supervised screening. Trainees are supervised by a group of senior scientists known as Mentors, who are integral to the success of our training program.

After 2 years, the trainees are eligible to sit for the Australian Society of Cytology certificate - a national examination which tests competency in all aspects of Cytology screening in Australia. On several occasions, a QML Pathology candidate has gained the highest mark in this exam, and many of our candidates have passed with distinction.

Specialist Registrars in Histopathology also make use of the excellent teaching resources available in the Cytopathology Department.

QML Pathology Cytopathology is very proud of the quality of its graduates and the culture of ongoing education in the department. This commitment to training forms one aspect of the ongoing goal to maintain the high quality cytology service that QML Pathology Department of Cytopathology offers.

We are pleased to introduce our two newest graduates Amy Hassum (pictured left) and Kerryn Buchanski (right) who graduated in September 2012.

Since 1995, four training co-ordinators have overseen the training programme. Our current co-ordinator, Terese Boost (pictured centre), has held the position for five years. Terese is herself a graduate of the original QML Pathology training programme in 1995, gaining her ASC certificate in 1998 and a Master’s degree in Cytology in 2006.
Collection Centre Updates

NEW COLLECTION CENTRES

Bald Hills .................................................................(07) 3261 1486
11 Bald Hills Road
Opening Hours:
Mon - Fri: 7.00am – 12.00pm

Buderim .................................................................(07) 5441 0200
16 - 18 King Street
Opening Hours:
Mon - Fri: 8.00am – 12.00pm

Canungra ...............................................................(07) 5543 4800
49 Christie Street
Opening Hours:
Mon - Fri: 8.00am – 11.00am

Collingwood Park .................................................(07) 3814 3377
Redbank Plaza Medical Centre, Level 1 Redbank Plaza
1 Collingwood Park Drive
Opening Hours:
Mon - Fri: 8.00am – 1.00pm

Mackay – Caneland Dental .................................(07) 4951 2999
Caneland Dental, Caneland Central Shopping Centre
Cnr Mangrove Road & Victoria Street
Opening Hours:
Mon - Fri: 9.00am – 1.00pm

Redland Bay ........................................................(07) 3829 2903
Shop 4, 100 Donald Road
Opening Hours:
Mon - Fri: 7.00am – 12.00pm

Sumner .................................................................(07) 3376 5051
1/50 Sumners Road
Opening Hours:
Mon - Fri: 7.30am – 11.30am, 12.00pm – 1.30pm

RELOCATED COLLECTION CENTRES

Pialba .................................................................(07) 4124 8645
14 Liuzzi Street
Opening Hours:
Mon - Fri: 7.00am – 12.00pm

THE FOLLOWING COLLECTION CENTRES ARE NOW BY APPOINTMENT ONLY

Cairns City ..........................................................(07) 4031 2668
Barrier Reef Medical Centre, 377 Sheridan Street

Cooroy East ......................................................(07) 5441 0200
Cnr Pearl and Elm Streets

Ibuki .................................................................(07) 5441 0200
Ibuki Health and Wellness, 6 Quamby Place, Noosa Heads

Imbil .................................................................(07) 5441 0200
6 Imbil Island Road

Peregian Springs ...................................................(07) 5441 0200
Peregian Springs Shopping Centre, Havana Road West

Rosslea ..............................................................(07) 4728 9193
112 Bowen Road

Springwood ......................................................(07) 3290 1501
Dennis Road Medical Centre, 18 Dennis Road

Townsville City ..................................................(07) 4724 2794
Urban Quarters-Townsville
Room 4, My Family Doctors, Stanley Street
Doctor’s Noticeboard

The Doctor’s Noticeboard is a free service for practitioners to advise changes to their practice. If you would like to place a notice, please email details to info@qml.com.au.

DR NAEEM KHAN, MBBS, FRCS, FRACS
General Surgeon and Gastrointestinal Endoscopist

Dr Naeem Khan is a General Surgeon and Gastrointestinal Endoscopist with a special interest in Laparoscopic Breast, ColoRectal and Hernia surgery. Dr Naeem Khan successfully completed 5 years of advanced surgical training at Princess Alexandra Hospital in Brisbane which is a centre of excellence for surgical training in Australia, and completed his post graduate training in Queensland in 2011.

Prior to this Dr Khan obtained his English fellowship from the Royal College of Surgeons and Physicians in 2000, has worked as a surgeon in South Africa and has acquired a very broad surgical experience.

In addition, Dr Khan is a senior lecturer (University of Queensland) and is a regular tutor of junior doctors and international medical graduates. He takes pride in providing the best professional advice and personable service to which his patients can relate.

Based at Caboolture Public Hospital, he also operates and consults at Caboolture Private Hospital.

Appointments for Dr Khan can be made on: (07) 5495 9440.

PROF. PAMELA MCCOMBE would like to advise that she has a sessional room available at:
Suite 286, Ground Floor
St Andrew’s Place, 33 North Street
Spring Hill Q 4000 (Opp. St Andrew’s Hospital)

Sessions are available at the following times:
Wednesdays AM/PM
Thursdays PM
Fridays AM

Please call (07) 3236 9960 or email reception@pmccombe.com.au for further information.

DR DAVID PHILLIPS, Consultant Physician, Diabetes, Thyroid and Endocrine has relocated to:
118 Ashmore Road
Benowa QLD 4215

Phone: (07) 5597 5976
Fax: (07) 5597 0459

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Suite 2
The Hub Specialist Centre
Cnr Loraine & Rickey Streets, Capalaba

DR ANDREW DAVIDSON
Fertility Specialist and Gynaecologist

As of 5th November 2012, Dr Davidson’s new Brisbane Practice address will be:
Level 10, Watkins Medical Centre
225 Wickham Tce BRISBANE 4000

Please use our existing Robina contacts:
Phone: (07) 5667 7711
Fax: (07) 5667 7733
Email: reception@adavidson.com.au

ERRORS & OMISSIONS
In the last issue of the QML Pathology Doctors newsletter, we mentioned the discontinuation of the faecal reducing substance test. The entry was titled Fat Reducing Substances, when it should have been titled Faecal Reducing Substances.
EVE HEALTH PIONEERS TELEHEALTH

Eve Health is proud to announce Telehealth, a new initiative in patient accessibility and care. Telehealth offers the potential for significant patient benefits, particularly in remote, regional and outer metropolitan areas. Telehealth consultation aims to provide immediate access to specialists without the time and expense of travel to our metropolitan centre.

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Phone: (07) 3332 1999
Email: telehealth@evehealth.com.au
Please visit our website www.evehealth.com.au for more information on our doctors.

DR NAVID ADIB, MBBS(Qld), FRACP(Paed Rheum), PhD(Manchester)
Paediatric Rheumatologist
Childhood musculoskeletal and joint pains
Inflammatory arthritis and Auto-immune diseases
Wesley Rooms:
Suite 13, Level 10
Evan Thomson Building
24 Chasely Street
Auchenflower 4066
Bookings
Ph: (07) 38701029
Fax: (07) 3871 0700

DR LEN YARED, MBBS, FRANZCOG, FRCOG
Obstetrician & Gynaecologist
Wishes to advise that he is still practicing in Obstetrics and Gynaecology and that his practice address is:
643 Logan Road, Greenslopes, Qld 4120
Phone: (07) 3394 1071
Fax: (07) 3847 1538
Email: dryaredrooms@westnet.com.au
After Hours: (07) 3394 3636

GP POSITION AVAILABLE - BRIBIE ISLAND
Bellara Family Medical Practice
Opportunity for F/T VR GP to join our long established GP owned seaside Practice. The Practice is fully computerised, accredited and offers mixed billing. We have an excellent supportive team of Doctors, Registered Nurse and Admin staff. Family friendly hours with no on-call. The Practice is covered by an after hours service.

Please contact Trish Jackson (Practice Manager) on Ph: (07) 34089077 (office hours), or Dr Raj on Ph: 0418 714 183 or email: jraj@ozdoc.com.au.

POSITION VACANT
Lawnton Country Market Medical Centre
VR and Non VR, Male and Female Doctors required. DWS and AoN available. We are located in a very busy shopping centre next door to the Chemist. Looking for doctors to work flexible hours with a higher income, without a longer waiting period.

High percentage guaranteed. The practice has RN support, Physiotherapy, Exercise Physiotherapy, Dietician, Psychologist, Podiatry and plans for onsite pathology.

All enquiries please phone Neil on 0406 804 559.

Warfarin Dosing Over Christmas

QML Pathology wishes to advise that over the upcoming Christmas period, the QML Pathology Warfarin Care Clinic will be closed. Please note that NO NEW REGISTRATIONS will be taken from 2.00pm on Friday, 14 December 2012, with the registration line re-opening at 7.00am on Wednesday, 2 January 2013.

During this period, it is essential that any new patients on Warfarin are supplied with instructions and/or referred to their local doctor for supervision. Patients who are currently monitored by QML Pathology and are being discharged from hospital will be accepted over this period.
## Infectious Diseases Report

### GEOGRAPHIC DISTRIBUTION - SEPTEMBER 2012

<table>
<thead>
<tr>
<th>ORGANISM</th>
<th>Regions (as per key below)</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td>Adenovirus (not typed)</td>
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<td>78 104</td>
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<td>Campylobacter jejuni</td>
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<td>Hepatitis B virus</td>
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<td>Hepatitis C virus</td>
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<td>Hepatitis D virus</td>
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<td>Herpes simplex Type 1</td>
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<td>HTLV-1</td>
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<td>Human Metapneumovirus</td>
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<td>Influenza A virus</td>
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<td>Influenza B virus</td>
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<td>Legionella pneumophila (all serogroups)</td>
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<tr>
<td>Leptospira species</td>
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<tr>
<td>Measles virus</td>
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<td>Mumps virus</td>
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<td>Mycoplasma pneumoniae</td>
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<td>Neisseria gonorrhoeae</td>
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<td>Parainfluenza virus</td>
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<td>Rickettsia - Spotted Fever Group</td>
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<td>Ross River virus</td>
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<td>Salmonella paratyphi A</td>
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<tr>
<td>Salmonella paratyphi B</td>
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<td>Salmonella typhi</td>
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<td>Streptococcus Group A</td>
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<td>Toxoplasma gondii</td>
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<td>Treponema pallidum</td>
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<tr>
<td>Trichomonas vaginalis</td>
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<td>Varicella Zoster virus</td>
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<td>218 235 175 222</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>273 671 323 141 39 9 640 2 527 235 1115 425 163 271 95</td>
<td>4919 7933 4897 3769</td>
</tr>
</tbody>
</table>

### REGIONS:

- Mackay
- Cairns
- Mount Isa
- Gold Coast/Northern Rivers
- Ipswich
- New England
- North Brisbane Suburbs
- 8 Northern Territory
- 9 Redcliffe
- 10 Rockhampton
- 11 South Brisbane Suburbs
- 12 Sunshine Coast
- 13 Toowoomba
- 14 Townsville
- 15 Wide Bay/Burnett

**FURTHER HISTORICAL CLINICAL DATA CAN BE OBTAINED BY CONTACTING YOUR LOCAL MEDICAL LIAISON OFFICER.**

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