Faculty of Medicine

School of Medical Sciences

PATH 3206

Molecular Basis of Disease B

SESSION II, 2009

CONTENTS

Course staff

Dr C van Vliet (Course Convener), Dr M Dziegielewski (Co-convener), Dr G Velan (Head of Teaching for Pathology), Professor N Hawkins (Head of School), Professor R Kumar, Dr P Polly, Dr S Champion, Dr B Kan and Dr S Van Es.
Guest Lecturers: Professor Bernard Stewart, Associate Professor Miles Davenport, Mr Marcus Cremonese

Course administration

Administrative and general problems related to your attendance, or the content and conduct of the course, can in the first instance be addressed by consulting Dr Christine van Vliet (c.vanvliet@unsw.edu.au) or Dr Mark Dziegielewski (m.dziegielewski@unsw.edu.au) by e-mail. Students wishing to see other members of staff should call in at the School office (ground floor) and **make an appointment** with the assistance of the staff. If students have difficulties of a personal nature, they should contact the School's Grievance Officer, Dr P. Pandey, or Prof Nick Hawkins, the Head of School.

Should you feel that there are particular circumstances that have affected your performance in the course; you should lodge an application for special consideration. The procedures involved in this are outlined in the UNSW Student Guide, and special forms are widely available on campus e.g. Student Health Centre, Student Centre.
Information on the different research units in the Department of Pathology and the research interests of each staff member is available at Department of Pathology's home page at http://medicalsciences.med.unsw.edu.au/

All students in course PATH3206 are advised that email is the official means by which the School of Medical Sciences at UNSW will communicate with you. All email messages will be sent to your official UNSW email address (e.g., z1234567@student.unsw.edu.au) and, if you do not wish to use the University email system, you MUST arrange for your official mail to be forwarded to your chosen address. The University recommends that you check your mail at least every other day. Facilities for checking email are available in the School of Medical Sciences and in the University library. Further information and assistance is available from DIS-Connect, Tel 9385 1777. The UNSW Library runs free email courses.

Course details

This course is offered during semester 2 and counts for six units of credit. PATH2201 (Processes in Disease) and PATH3205 (Molecular Basis of Disease A) are prerequisites for the course. It is also advantageous for students to have undertaken previous study in ANAT3231 Cell Biology.

Course objectives

PATH3206 aims to promote understanding of the molecular pathogenetic mechanisms underlying common diseases including congenital disorders, neoplasia, as well as diseases of the gastrointestinal, genitourinary and central nervous systems.

Student learning outcomes

For the following common disorders:

- Neoplasms of the colon, cervix, skin, breast and prostate;
- Congenital, gastrointestinal, genitourinary and central nervous systems diseases;

At the completion of this course you should be able to:

1. Describe and explain the molecular and cellular pathogenetic mechanisms;
2. Describe the macroscopic and microscopic appearances;
3. Correlate the clinical features with the underlying pathogenetic mechanisms;
4. Discuss recent advances in knowledge pertaining to the molecular pathogenesis;
5. Develop written and oral skills in scientific communication.

Graduate Attributes

The students will be encouraged to develop the following Graduate Attributes by undertaking the selected activities and knowledge content. These attributes will be assessed within the prescribed assessment tasks (see Assessment p5):

1. An in-depth engagement with the relevant disciplinary knowledge in its interdisciplinary context.
2. The capacity for analytical and critical thinking and for creative problem-solving.
3. The ability to engage in independent and reflective learning.
4. The skills of effective communication.

Rationale for the inclusion of content and teaching approach

The intended learning outcomes are achieved through study of the common patterns of response to injury, which are often referred to as pathological processes. To understand these processes, you will draw on your knowledge of normal anatomy, histology, biochemistry and physiology.

This course complements PATH3205 Molecular Basis of Disease A. For those wishing to pursue a career in research or hospital based laboratory work, the course will not only develop their basic knowledge of molecular processes, but also provide a framework for understanding how these processes link to the modern practice of medicine. Similarly, for those who may wish to pursue a career in the health sciences, the course will provide an understanding of the cellular and molecular processes underlying the clinical manifestations of disease.

Teaching strategies

The course employs a variety of teaching modes in order to facilitate your learning:

1) A series of lectures introduce you to pathological processes, as well as specific examples of those processes affecting organs and tissues;
2) Small group tutorials are intended to extend and amplify your understanding of material presented in lectures in an interactive format, where you are encouraged to clarify any difficulties regarding the concepts discussed;

3) Clinico-pathological correlation sessions are intended to allow you to apply your understanding of disease processes to macroscopic manifestations of disease in organs and tissues (lesions), and to correlate these with the clinical manifestations;
4) Practical classes employ computer-based virtual microscopy, in order to permit correlation between disease processes, changes in cells and tissues at the microscopic level and the manifestations of disease;
5) Learning is supported via an eLearning Vista module (accessible via student number and UniPASS at http://vista.elearning.unsw.edu.au). Announcements, timetables, lecture slides and other resources will be made available during the course;
6) The PATH3206 Student Manual contains specific learning objectives for tutorials and practical classes, together with the course timetable and useful background information.

Practical classes and tutorials in Molecular Basis of Disease B are aimed at amplifying and extending your understanding of the topics gleaned from attendance at lectures and reading of the recommended text, as well as correcting any misconceptions. Hence, adequate preparation and active participation are essential.

Practical classes will reinforce the clinico-pathological correlations associated with each topic. They are intended to help you to acquire the ability to recognize the macroscopic and microscopic features of pathology specimens and to relate the pathology to clinical application. Macroscopic "pots" will be generally used in conjunction with projected microscopic slides, x-rays and other materials.

Any student experiencing difficulty with the course should discuss this either with the Convener of PATH3206, Dr van Vliet, the School's Grievance Officer, Dr P Pandey, or the Head of School.

Research opportunities

Opportunities exist for all students wishing to undertake undergraduate and postgraduate research programs within the School of Medical Sciences. Information can be accessed via the Faculty of Medicine directory for the School of Medical Sciences at:
http://medicalsciences.med.unsw.edu.au/somsweb.nsf/page/Research

Assessment

Students will undertake multiple forms of assessment during session:

- Online progress assessment x 2 — 5% (2x2.5%)
- Mid session examination (objective items + short answer) — 10%
- Group project: poster and oral defence — 20%
  - *(Group member teamwork evaluation 5%)*
  - *(Academic staff evaluation 15%)*
- Practical examination — 15%
- Final examination (short answers) — 50%

Group project: Poster and oral defence

At the commencement of the course, students will be allocated into groups of three or four students. Each group will be given a set of three (3) specimens, which illustrate pathological changes which may occur as a result of a particular disease or set of predisposing factors.

The students are to **create a poster** using the guidelines provided by Mr Cremonese in his lecture "How to design posters", describing the macroscopic specimens and linking them together in a plausible way; *e.g.* all 3 may be related to the same cause or 2 specimens may be complications of a primary condition in the other specimen. The underlying pathobiological mechanisms of the disease(s) present must be explained and related to the clinical manifestations. Particular reference to current scientific concepts should be given using sources other than textbooks. An ability to use database searching and current literature must be evident.

Each group will have 15 minutes to present an **oral defence** of their poster. The spokesperson for the group (nominated by the students themselves) should deliver an overview of the poster in the first 2-3 minutes and in the remaining time all members of each group must 'defend' their poster to a Department of Pathology staff member.

The aim of the group project is to provide an in-depth understanding of individual diseases. The project will encourage students to think critically and problem solve in order to determine the interrelatedness of pathological specimens. The presentation and oral defence will enhance students' skills in effective communication.

POSTER: Describe the macroscopic specimens and explain how these specimens are interrelated. Outline the underlying pathobiological mechanisms of the disease(s) present in the specimens and relate these to the clinical manifestations.

SESSION II

Week 2:	Students allocated into groups of three or four students.
Week 3:	The specimens allocated to each group will be posted on eLearning Vista.
Week 11:	**Group poster due electronically no later than 5pm Monday 5/10/2009.** Posters must be submitted electronically as a PowerPoint slide, using the poster submission icon on the PATH3206 WebCT Vista website. In addition the text of the posters must be submitted as a separate, fully referenced Word document, using the Turnitin icon on the PATH3206 WebCT Vista website, no later than 5pm Monday 5/10/2009, (see Submission of group project).
Week 12:	Group poster presentation and oral defence session.

Assessment criteria

Group member teamwork evaluation

Each student in the group will complete an evaluation form for each member of their group. Students must hand the evaluation forms to the staff member during the poster presentation session. The student's teamwork evaluation will be marked out of 5 and will contribute 5% of the final course mark. The mark will be an average of all the group members' assessments of the student. The Group member teamwork evaluation form is available on WebCT Vista.

Group member teamwork evaluation form

Student name and student ID:
…….

Group number: …….

Assessor's name and student ID:
……

Place a cross in the appropriate mark box for each of the five criteria listed. Total the score at the bottom of the table. Please justify your marks in the comments section.

	0	0.5	1.0
1. Participation in the planning of the presentation			
2. Execution of allocated tasks effectively and on time			
3. Attendance to meetings called on by group members			
4. Contribution to group discussion			
5. Scientific quality of contribution			

TOTAL: /5

Comments:

Group poster and oral defence evaluation

Groups will be marked on their presentations by staff members from the Department of Pathology according to the following criteria:

1) The group gives a macroscopic description of the three specimens and demonstrates an understanding of the interrelatedness of the specimens.
2) The group demonstrates an understanding of the underlying pathobiological mechanisms leading to the disease(s) present in the specimens and relates these to the clinical manifestations.
3) The group demonstrates an ability to utilise the current medical literature to support arguments.
4) The poster shows a high standard of design and effectively communicates key concepts to the audience.
5) Group members answer questions clearly and directly.

The presentation will be marked out of 15 and will contribute 15% of the final mark for the course. For **each** of the above objectives, marks will be distributed as follows:

- Did not address the objective 0
- Attempted to address the objective but did not achieve satisfactory standard 1
- Satisfactorily addressed the objective 2
- Addressed the objective well 3

Submission of group project

Posters must be submitted electronically as a PowerPoint slide, using the poster submission icon on the PATH3206 WebCT Vista website **no later than 5pm Monday 5/10/2009**.
In addition the text of the posters must be submitted as a separate fully referenced Word document, using the Turnitin icon on the PATH3206 WebCT Vista website **no later than 5pm Monday 5/10/2009**. Figures, diagrams and tables used in the poster must also be referenced in the Word document. All posters will be assessed for plagiarism by use of Turnitin software. Please use the American Psychological Association (APA) referencing style (see http://info.library.unsw.edu.au/biomed/skills/direct/Info_Skills_Docs/apa/apa1.htm).

Late group projects

Students will be penalised 5% of the mark for each day the poster is late. **Posters submitted later than 5pm Monday 12/10/2009 will receive a zero grade**.

Online progress assessments

Two online progress assessments (each worth 2.5% of the final mark) consisting of 15 MCQs and one short answer question, focusing on learning outcomes 1, 3 and 5, will be provided. These assessments are to be completed during the 10 days in which each is available **(assessment 1 will be available in week 6; assessment 2 will be available in week 10).** These assessments encourage independent and reflective learning as the student may attempt the assessment as often as they wish, within the time allowed, until they

receive a satisfactory score (>90%). Students will receive 2.5% of the final mark for satisfactory completion of each assessment.

Mid-session examination

A mid-session exam in Week 9 (10% of the final mark) consisting of 15 MCQs and one short answer question, focusing on learning outcomes 1, 3 and 5 will be conducted. The examination will include material covered in Weeks 1-8 of PATH3206. The skills achieved by mastering the online progress assessment will be assessed in this exam. The short answer question is in preparation for the end of course exam.

Practical examination

A practical examination in Week 13 (15% of the final mark), focusing on learning outcome 2 will be conducted. This will consist of a series of stations each with questions based on material presented during the practical sessions.

Final written examination

A three-hour end of course examination (50% of the final mark) which will comprise **four** short-answer / essay style questions. The questions assess all the learning outcomes, with at least one question testing students' ability to correlate clinical features with underlying pathogenetic mechanisms. This exam encourages an in-depth engagement with pathology within a clinical context. The questions vary in style; some questions may have two parts.

Missed exams

If in any circumstances you unavoidably miss an examination, you must inform the Registrar and also contact the relevant Course Office immediately. Normally, if you miss an exam (without medical reason) you will be given an absent fail. If you arrive late for an exam no time extension will be granted. It is your responsibility to check timetable and ensure that you arrive with sufficient time.

Supplementary examination

A supplementary examination may be awarded at the discretion of the Department of Pathology to students who have provided evidence for special consideration according to the UNSW guidelines. **It is intended that supplementary exams for this course will be held in the week commencing Monday 7th December.** The deferred exam may include a significant oral element. Students who believe that they are eligible for further assessment must contact Dr van Vliet to seek further information.

Medical certificates

If you miss any examination for medical reasons you must lodge a medical certificate with New South Q within **3 DAYS** (refer to UNSW Student Gateway@ www.student.unsw.edu.au for further details).

Academic honesty and plagiarism

What is Plagiarism?
Plagiarism is the presentation of the thoughts or work of another as one's own.* Examples include:

- direct duplication of the thoughts or work of another, including by copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork, design, drawing, circuitry, computer program or software, web site, Internet, other electronic resource, or another person's assignment without appropriate acknowledgement;
- paraphrasing another person's work with very minor changes keeping the meaning, form and/or progression of ideas of the original;
- piecing together sections of the work of others into a new whole;
- presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and
- claiming credit for a proportion a work contributed to a group assessment item that is greater than that actually contributed.†

For the purposes of this policy, submitting an assessment item that has already been submitted for academic credit elsewhere may be considered plagiarism.

Knowingly permitting your work to be copied by another student may also be considered to be plagiarism.

Note that an assessment item produced in oral, not written, form, or involving live presentation, may similarly contain plagiarised material.

The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does *not* amount to plagiarism.

The Learning Centre website is main repository for resources for staff and students on plagiarism and academic honesty. These resources can be located via:

www.lc.unsw.edu.au/plagiarism

The Learning Centre also provides substantial educational written materials, workshops, and tutorials to aid students, for example, in:

- correct referencing practices;
- paraphrasing, summarising, essay writing, and time management;
- appropriate use of, and attribution for, a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre.

Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management.

Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

* Based on that proposed to the University of Newcastle by the St James Ethics Centre. Used with kind permission from the University of Newcastle
† Adapted with kind permission from the University of Melbourne.

The School of Medical Sciences will not tolerate plagiarism in submitted written work. The University regards this as academic misconduct https://my.unsw.edu.au/student/atoz/Plagiarism.html and imposes severe penalties. Evidence of plagiarism in submitted assignments, etc. will be thoroughly investigated and may be penalised by the award of a score of zero for the assessable work. Flagrant plagiarism will be directly referred to the Division of the Registrar for disciplinary action under UNSW rules.
The attention of students is drawn to the following extract from the above website:
"The basic principles are that you should not attempt to pass off the work of another person as your own, and it should be possible for a reader to check information and ideas you have used by going to the original source material. Acknowledgment should be sufficiently accurate to enable the source to be located speedily."
"*The following are some examples of breaches of these principles:*
a) Quotation without the use of quotation marks. It is a serious breach of these rules to quote another's work without using quotation marks, even if one then refers to the quoted source. The fact that it is quoted must be acknowledged in your work.
b) Significant paraphrasing, e.g., several sentences, or one very important sentence, which in wording are very similar to the source. This applies even if the source is mentioned, unless there is also due acknowledgment of the fact that the source has been paraphrased.
c) Unacknowledged use of information or ideas, unless such information or ideas are commonplace.
d) Citing sources (e.g., texts) which you have not read, without acknowledging the 'secondary' source from which knowledge of them has been obtained."

Appropriate citation of sources therefore includes surrounding any directly quoted text with quotation marks, with block indentation for larger segments of directly-quoted text. The preferred format for citation of references is an author-date format with an alphabetically arranged bibliography at the end of the assignment. Note that merely citing textbooks or website URLs is unlikely to yield a bibliography of satisfactory standard. ***The internet should be avoided as a primary source of information***. Inclusion of appropriate journal articles, both primary research publications and reviews, is usually expected.

Course Schedule 2009

Week	Date	Time	Location	Lecturer	Title
2	28/7/2009	9	WW G2/G4	Dziegielewski	**Practical** – Revision of neoplasia
		10			
	29/7/2009	9	Biomed F	Stewart	**Lecture** – Molecular basis of growth
		10	Biomed F	Stewart	**Lecture** – Carcinogenesis I
3	4/8/2009	9	WW G2/G4	Dziegielewski	**Practical** – Carcinogenesis
		10			
	5/8/2009	9	Biomed F	Stewart	**Lecture** – Carcinogenesis II

		10	Tutorial rooms	See allocation	**Tutorial** – Neoplasia
4	11/8/2009	9	WW G2/G4	Kumar	**Practical** – Histopathology of neoplastic tissues
		10			
	12/8/2009	9	Biomed F	Hawkins	**Lecture** – Colorectal carcinogenesis I
		10	Biomed F	Hawkins	**Lecture** – Colorectal carcinogenesis II
5	18/8/2009	9	WW G2/G4	Hawkins	**Practical** – Colorectal carcinogenesis I
		10			
	19/8/2009	9	Biomed F	Cremonese	**Lecture** – How to design posters
		10	Tutorial rooms	See allocation	**Tutorial** – Carcinogenesis
6	25/8/2009	9	WW G2/G4	Hawkins	**Practical** – Colorectal carcinogenesis II
		10			
	26/8/2009	9	Biomed F	Kan	**Lecture** – Cervical carcinoma
		10	Tutorial rooms	See allocation	**Tutorial** – Colorectal carcinoma
					Online Progress Assessment 1 with feedback
7	1/9/2009	9	WW G2/G4	Kan	**Practical** – Cervical carcinoma
		10			
	2/9/2009	9	Biomed F	Dziegielewski	**Lecture** – Prostate carcinoma
		10	Biomed F	Davenport	**Lecture** – Cancer immunology
				Mid Session Break	
8	15/9/2009	9	WW G2/G4	Dziegielewski	**Practical –** Carcinoma of the breast and prostate
		10			
	16/9/2009	9	Biomed F	Velan	**Lecture** – Skin neoplasia
		10	Tutorial rooms	See allocation	**Tutorial** – Cervical carcinoma
9	22/9/2009	9	WW G2/G4	Dziegielewski/van Vliet	**Mid Session Examination**
		10	Tutorial rooms	See allocation	**Tutorial** – Breast and prostate carcinoma
	23/9/2009	9	Biomed F	Polly/DiGirolamo	**Orientation to Honours**
		10	Biomed F	Dziegielewski	**Lecture** – Renal Disease
10	29/9/2009	9	WW G2/G4	Dziegielewski	**Practical** – Renal disease
		10			
	30/9/2009	9	Biomed F	Dziegielewski	**Lecture** – Liver disease
		10	Tutorial rooms	See allocation	**Tutorial** – Renal disease
					Online Progress Assessment 2 with feedback
11	6/10/2009	9	WW G2/G4	Dziegielewski	**Practical** – Liver disease
		10			
	7/10/2009	9	Biomed F	van Vliet	**Lecture** – Peptic ulcer disease
		10	Biomed F	Champion	**Lecture** – Congenital disease
12	13/10/2009	9	WW G2/G4 Hybrid 109/110	Kan Polly van Vliet Kumar Dziegielewski	***Poster Presentation Session***
		10			
	14/10/2009	9	Biomed F	Velan	**Lecture** – Cerebrovascular Disease
		10	Tutorial rooms	See allocation	**Tutorial** – Upper GIT disease
13	20/10/2009	9	WW G2/G4	Dziegielewski/van Vliet	**Practical – Practical Examination**
		10			
	21/10/2009	9	Biomed F	Velan	**Lecture** – Alzheimers disease
		10	Tutorial rooms	See allocation	**Tutorial** – Poster Feedback Session / Revision

Resources for students

You are expected to acquire the following text:
Basic Pathology, 8th Edition. V. Kumar, R. Cotran & S Robbins (2007). Saunders & Co.

Students wishing to study the molecular biology or clinical features of diseases in greater depth might consider the purchase of the following text:
Robbins and Cotran Pathologic Basis of Disease. 8th edition. V. Kumar, A.K. Abbas & N. Fausto. (2009) Elsevier Saunders.

Additional learning resources

The PATH3206 Student Manual outlines the learning objectives for the tutorials and practical classes. Although these learning objectives may not all be covered within a particular class it is imperative that you address each of these issues during your own period of study and revision.

In addition, there are many resources available on the web, which vary from simple patient information brochures to on-line pathology courses to information on the latest research. Some general sites you may find useful are:

Medline Plus ('health topics' index of disease with information)
http://www.nlm.nih.gov/medlineplus/healthtopics.html
University of Iowa (on-line histological slides on many of the topics covered)
http://www.path.uiowa.edu/virtualslidebox/nlm_histology/
http://www.path.uiowa.edu/virtualslidebox/iowa_histopathology/index.html
The Cancer Council New South Wales
http://www.nswcc.org.au/
National Cancer Institute
http://www.cancer.gov/

PATH 3206 eLearning Vista Module

Students enrolled in PATH3206 will be able to access the timetable, lecture notes and related information via My eLearning Vista on the following link:
http://vista.elearning.unsw.edu.au.

The Museum of Human Disease

The Donald Wilhelm Museum of Human Disease is located on the ground floor of the Samuels Building (Building F25). Originally located on the 5th floor of the Wallace Wurth Building, it was established by Professor Donald Wilhelm, the Foundation Professor of Pathology at this university. Thanks to his foresight, and to the tireless efforts of Dr G. Higgins (the Museum Curator until 2004), the Museum has been meticulously maintained and updated over the years to reflect the changing patterns of disease in our society. The Museum contains over 2,700 specimens (or "pots"), which display diseased human tissue at the macroscopic level, usually preserved in formalin. Specimens are obtained both from organs removed surgically and from tissue obtained at autopsy, where the natural history of disease is in full view. **Please take note that some specimens of diseases which have become rare, e.g. diphtheria, are over 60 years old, and are irreplaceable.** Each specimen is numbered and is accompanied by a clinical history (when known), a

macroscopic description of the abnormalities displayed, and a histopathological description of changes at the microscopic level (where relevant). That information, specific to each of thirty areas (or "bays"), can be found in the Museum catalogues located in a bracket within each bay.
All the specimens in the museum are arranged in one or other of two major groups. One group comprises collections of specimens according to pathological processes such as congenital, inflammation and healing, vascular, neoplasia etc. The second group comprises collections of specimens under organ systems, such as cardiovascular, central nervous, renal etc. As responsible adults, we expect you to maintain decorum in the Museum, behave with care and respect for the integrity of the specimens, and help to keep the Museum tidy at all times. This means no eating or drinking in the Museum, and always returning specimens and catalogues to their allocated places. **Do not shake the pots!** This activity conveys no useful information, but often damages the specimens. If you discover that a specimen is leaking or broken, follow the instructions listed in the safety notice below. **Remember that the Museum is a precious learning resource, of which you are encouraged to make full use**.

Security in the museum

It is a crime under the Human Tissue Act to steal or mistreat material preserved in the Museum or practical class laboratories. Anyone who contravenes the Act will be prosecuted.
In order to protect the collection of specimens, access to the Museum is restricted for students in 3rd and 4th Year Medicine and PATH3206 during weekdays from 8 a.m. to approximately 8 p.m. The Museum is security locked, and can only be entered by using your student card to enable the doors to be opened. Mr Lansdown, Ms Hair and Mr Mitchell play a supervisory role during office hours.
The Museum and practical class laboratories are under constant electronic surveillance.

Safety in the museum

- Always handle museum specimens with care and respect. All specimens consist of generously donated human tissue.
- The specimens are preserved in fixative solutions which contain a variety of toxic compounds:

Chemical	**Percentage Composition**
Glycerol	1.6 (v/v)
Saturated Camphor in Ethanol	0.16 (v/v)
Sodium Acetate	0.08 (w/v)
Formalin	0.16 (v/v)
Sodium Dithionate	0.25 (w/v)

- For reasons of hygiene, never take food or drink into the museum.
- Never leave a museum specimen on the floor, or in any precarious position.

- If a specimen is leaking, turn it upside down to prevent further leakage, then immediately inform Mr Alan Mitchell or a member of academic staff.
- If a specimen is broken, do not attempt to wipe up the spillage. Use the kitty litter provided in the central cupboards to absorb the fumes, then clear the area and immediately inform Mr Alan Mitchell or a member of academic staff.
- Remember that the museum is here for your benefit - your cooperation in maintaining neatness and safety at all times is appreciated.
- For more information on matters related to occupational and health safety policies of UNSW visit this web site. http://www.hr.unsw.edu.au/ohswc/ohs/ohs_home.html

Student support services

Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course convener prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equity and Diversity Unit at https://my.unsw.edu.au/student/atoz/Disability.html. Issues to be discussed may include access to materials, note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made. Information on designing courses and course outlines that take into account the needs of students with disabilities can be found at: www.secretariat.unsw.edu.au/acboardcom/minutes/coe/disabilityguidelines.pdf

Course evaluation and development

Student evaluative feedback on the course is gathered each year using UNSW's Course and Teaching Evaluation and Improvement (CATEI) Process. Student feedback is taken seriously, and continual improvements are made to the course based in part on such feedback.

Administrative Matters

You may also meet the following members of the School support staff during the course of the year:

Ms Soo Han Chup
Position: Administrative Officer
Location: Administrative Wing, Room MG14, Ground floor Wallace Wurth Building
Ms Chup is responsible for the distribution of Pathology manuals and Images of Disease CD-ROMs to students, and will assist in arranging interviews with academic staff within the Department.

Ms Carmen Robinson
Position: Teaching Administrative Assistant/Student Advisor
Location: Administrative Wing, Room MG14, Ground floor Wallace Wurth Building
Ms Robinson is responsible for general administration and student support within the School of Medical Sciences.

Mr Gavin McKenzie
Position: Technical Officer
Location: Room M101, Wallace Wurth Building
Mr McKenzie is responsible for the production and distribution of histopathology slides for use in practical classes.

Mr Robert Lansdown
Position: Museum Manager
Location: Room G04 Ground Floor Samuels Building, Building F25
Mr Lansdown provides support for all undergraduate teaching programs. He plays a major role in broadening the use of the Museum of Human Disease by supervising an integrated learning program for senior high school students and community interest groups. Mr Lansdown co-ordinates a network of volunteers, who assist with the supervision of visitors from outside the University.

Ms Kathryn Hair
Position: Museum Education Officer
Location: Room G04 Ground Floor Samuels Building, Building F25
Ms Hair provides support for all undergraduate teaching programs, and assists in delivering an integrated learning program for senior high school students and community interest groups.

Mr Alan Mitchell
Position: Museum Technical Officer
Location: Room G06 Ground Floor Samuels Building, Building F25
Mr Mitchell is responsible for the mounting and maintenance of Pathology Museum specimens, both on campus and in the associated teaching hospitals. Contact Mr Mitchell immediately if there are any broken or leaking specimens in the Museum.

Ms Jessica Hu
Position: SOMS Web Manager
Location: Room MG14 Administrative Wing, Ground Floor Wallace Wurth Building
Ms Hu maintains materials uploaded to *eLearning Vista*. Please contact Ms Hu if you have any inquiries related to PATH3206 online resources, including lectures, assignments, timetables and communications.
E-mail: Jessica.Hu@unsw.edu.au