SUBJECT REVIEW REPORT

DEPARTMENT OF ANATOMY

FACULTY OF MEDICINE
UNIVERSITY OF PERADENIYA

02nd - 03rd August 2006 & 17th January 2007

Review Team :
Prof. T. R. Weerasooriya, University of Ruhuna
Prof. (Ms.) B. E. Stephen, University of Colombo
Dr. Chrishantha Abeysena, University of Kelaniya

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1. SUBJECT REVIEW PROCESS

This report aims to present the subject review done in Anatomy, conducted in the first two years of the course leading to Batchelor of Medicine and Batchelor of Surgery (MBBS) at the Medical Faculty, University of Peradeniya.

The subject review process involved studying of the Self Evaluation Report (SER) by the Head of the Department of Anatomy (DA), and its assessment in relation to the aims and the intended student learning outcomes. The agenda for the visit to the Department of Anatomy (DA), University of Peradeniya is given in Annex 1.

The Review Team visited the DA for two days initially on the 2nd and 3rd of August 2006 and for one more day on the 17th January 2007. The Review Team was introduced to the Dean of the Faculty, Dr. Chula Gunasekera, who gave a brief introduction regarding the new curriculum reforms in the Medical Faculty, with the introduction of the semester system and the challenges both the staff and the students are facing in the evolution of the new curricular changes in the initial period of its implementation.

The Head of the DA, Prof. Mallika Sabanayagam, in her presentation focused in the key aspects of the SER. The Review Team was able to have a lengthy discussion with the members of the academic staff, which enabled the clarification of the SER. Absence of the Professor of Anatomy for the discussion was a draw back which may have happened due to a communication gap or an oversight.

The Review Team along with the Head and the staff of the DA observed facilities available for the teaching of anatomy (See Annex 2). Thereafter the Review Team visited the Technical Resource Centre 'TRC', and discussed with Dr. Vajira Weerasinghe, the Head of the Centre, the contribution by his unit to the Faculty. This was followed by a visit to the Curriculum Coordinating Centre (CCC), and Medical Education Unit (MEU). Dr. Kosala Marambe of the MEU explained to the reviewers the functioning of the two units in the planning and the evaluation process of the curriculum. In addition, the Review Team visited the e-library and observed a demonstration of intranet web based learning facilities pertaining to Anatomy by the Head, Dr. Tilak Jayalath. The last facility visited by the Review Team was the Medical Library. The Librarian, Mrs. Sriyani Perera explained about the books available for Anatomy.

Next, the Review Team had separate meetings with the academic and the Technical officers without the presence of the Head of DA, on matters pertaining to the new curriculum development and content, teaching learning methods, assessments, peer evaluations, student feedback, implementation and the difficulties they have experienced and matters related to their personnel development were discussed.

As the students were on strike, the Review Team did not get a chance of following student practicals, tutorials, lectures in the first two days, but was only able to watch how a body side tutorial is conducted on the 17th of January 2007. Review Team was able to speak to some students in different groups and ascertain some of their views on the teaching learning methods, student support facilities, counseling and student feedback process.

Documents supporting the self-evaluation report as well as those identified during the review were perused (Annex 3). The process of student counseling and post graduate programme in the department too were discussed. The Review Team was able to have a discussion with the minor employees to find out what contributions they provide towards the new teaching programme in

the Faculty and the DA. Whether the DA had informed them about the curricular revisions made and what is expected out of them.

2. BRIEF HISTORY OF THE UNIVERSITY, FACULTY AND THE DEPARTMENT

University of Peradeniya

The University of Peradeniya has a sixty year old University tradition which commenced with the inception of the University of Ceylon in Colombo in 1942, under the Ceylon University ordinance No. 20 and shifted to Peradeniya in 1952. At present the University has seven Faculties and 64 Departments covering a wide range of study areas. Furthermore two teaching hospitals and several centers and units have been added to perform outreach activities and programmes. It is also the largest residential campus in Sri Lanka.

Department of Anatomy, Faculty of Medicine

The DA was inaugurated in 1962 with the onset of the Faculty of Medicine, University of Peradeniya. Initially located in a temporary building, the department moved to its permanent location on the ground floor of the new pre-clinical block, in the year 2000. The department has a Histology Teaching Laboratory, a Dissection Hall with a depository of prosected specimens and an Anatomy Museum with mounted specimens and facility for quiet study. Dr. Wasir Palli was the first to Head the department. Subsequently Professors L Jayawardena, A D P Jayatilake, E. R. Wikramanayake and Malkanthi S Chandrasekera served as heads. Prof. A. S. B. Wijekoon and Dr. S. B. Adikari served as acting heads before the current head Prof. M. Indran Sabanayagam took over in October 2005. The present staff in the DA is as follows:

Name and title of Staff		Date of initial Appointment
Professors:		
Prof. M Chandrasekera (Professor of Anatomy)	BDS (Cey), PhD (N' castle, UK)	04/11/1976
Prof. M Indran Sabanayagam (Head of Department)	BDS (Cey), PhD (Belfast, UK)	05/08/1977
Senior Lecturers:		
Dr D Gunasinghe	BDS (SL), MPhil (SL)	10/05/1996
Dr S B Adikari	MBBS (SL) PhD (Sweden)	27/07/2000
Lecturers:		
Dr J K Disanayake	MBBS (SL)	01/02/2000
Dr K M K K Kulasekera	MBBS (SL) Reading for PhD at Flinders University/Australia	27/07/2000

Dr A Sominanda	MBBS (SL), MPhil (SL) Reading for PhD at Karolinska University, Sweden	27/07/2000
Dr D L O Dissabandara	MBBS (SL) MPhil (SL) Reading for PhD at Griffith University, Australia	04/06/2001
Dr D Nanayakkara	MBBS (SL) Training for MD at Radiology Dept, Teaching Hospital, Peradeniya	28/02/2003
Dr Y B Jayasinghe	MBBS (Manipal) Training for MS at Surgical Unit, National Hospital, Colombo	12/03/2003

Temporary Lecturers:

Dr H M S Senanayake	-MBBS (SL)	01/02/2006
Dr A Nugaliyadde	-MBBS (SL)	01/02/2006
Dr A R Nihara	-MBBS (SL)	01/02/2006
Dr J M Wathsala Wajirani	-MBBS (SL)	01/02/2006

Administrative Staff:

Ms C de Silva	- Senior Staff Assistant (GCE, A/L)	01/01/1975

Technical Staff:

Mr H D A S Molligoda	- Chief Technical Officer, (.GCE, A/L)	01/09/1978
Mr S R Masakorale	- Staff Technical Officer, (GCE, O/L)	04/12/1979
Mr R W M A Rajapakse	- Staff Technical Officer, GCE, A/L)	01/12/1980
Ms J Gamage	- Staff Technical Officer, (BSc)	23/07/1983
Mr A G G Wijeratne	- Technical Officer Gr. I, (GCE, A/L)	11/10/1993
Mr C P S Illangasinghe	- Technical Officer Gr. I, (MLT, LLB (SL)	13/09/1993

Laboratory Attendants and Labourers:

Mr Y G Somadasa	-Lab Attendant, up-to (GCE, O/L)	02/05/1985
Mr K M Seneviratne	-Lab Attendant, up-to (GCE, O/L)	01/07/1986
Mr W M Jayatilake	-Labourer, up-to(GCE,O/L)	01/01/1995
Ms S P Rohini	-Labourer, up-to (GCE, O/L)	07/06/1997
Mr J A G Gunaratne	-Labourer, up-to (GCE, O/L)	19/11/1998

Vision and Mission of the Department

Vision: *"To be on par with other leading Anatomy Departments in the world by introducing modern methods of teacher learner interaction".*

Mission: "*To advance the state of knowledge of the structure of the human body as relevant to function, through innovative and high quality educational programmes at the medical undergraduate and postgraduate levels".*

3. AIMS AND LEARNING OUTCOMES

3.1 Aims

Aims of the DA are to:

- provide quality teaching and learning programmes at undergraduate level accredited by the Sri Lanka Medical Council (SLMC).
- provide research based teaching at higher levels.
- promote and provide where appropriate a multidisciplinary educational experience for students.
- develop and use information technology in support of teaching, research communication, administration and encourage innovative methods in the use of multimedia and IT.
- provide a stimulating, fair, friendly and supportive environment for all students.

3.2 Learning Outcomes

On successful completion of the course modules offered by the DA the student should have:

1. acquired knowledge, understanding and experience of relevant principles in Human Anatomy.

2 .a sound foundation in scientific knowledge and method

3. demonstrated their ability to understand the three dimensional organization of the structures of the human body.

3.1 Students will demonstrate knowledge in the following:

- organization of muscles, nerves and vessels in the human body, their attachments, course and distribution
- principles of lymphatic drainage and the arrangement of lymph nodes to understand spread of disease
- . tissue spaces and the associated danger in spread of infection.
- surface projection of internal organs.

3.2 The developmental process of the human factors from fertilisation to birth.

- congenital and developmental anomalies.
- the process of formation, fertilization and associated errors.

3.3. The arrangement of tissue systems and the organization of tissues and cells in organ systems.

4. developed the ability to analyze structural organization in order to manage diseases later on in the undergraduate program.

5. developed an understanding of their professional and ethical responsibilities.

6. developed their ability to communicate effectively, and work as team members.

4. FINDINGS OF THE REVIEW TEAM

4.1 Curriculum Design, Content and Review

The DA is one of the first departments to welcome students starting the Medical Degree Programme. Until the year 2005 the DA offered a traditional Anatomy course spanning over a period of four terms. Each term was of ten weeks duration. The course consisted of 336 hours of Gross Anatomy dissections, 80 hours of lecture demonstrations and 56 hours of tutorials. In addition, 90 hours of Histology lectures, 20 hours of Neuroanatomy lectures, 24 hours of Genetics lectures, 40 hours of Embryology lectures, and 12 hours of Radiology lectures were conducted. An additional 18 hours of Neuroanatomy practical classes were also offered. However, this method of traditional teaching with didactic lectures and practical classes went through an immense change with the revision of the curriculum. The Faculty has now embarked on Beyond 2004 Curriculum which consists of ten modules run over two semesters in the first year followed by two more semesters of the same modules in the second year. Learning within the department has shifted to emphasize the applied aspect of Anatomy within the framework of the Beyond 2004 Curriculum. Clinicians from various clinical fields including specialties of Surgery, Paediatrics, General Practice and Radiology, are involved in teaching at all levels.

In a given academic year up to 400 medical undergraduates are in the department learning Anatomy as per required by the Modules of the Beyond 2004 Curriculum. A variety of teaching methods are employed. Students are provided with a balanced mix of teaching through tutorials, practical, and demonstrations. The first year learning modules are taught around prosected specimens, objectively structured demonstrations, lectures and small group discussions, the second year modules include dissections. With the curriculum having emphasis on self directed learning, the staff members are inclined to spending more time in structuring the teaching programme, assessing the student seminars, and posters as well as in guiding them through intranet and web based learning. The DA, located on the ground floor of the new pre-clinical building, has spacious teaching areas to accommodate the requirements of the new curriculum. Through its willed body donation programme cadavers are made available to learn gross and topographical Anatomy.

On going review process from year 2004, staff experience and student feed back has resulted in alterations in the teaching methodology, e.g. an attempt to introduce dissections for students.

The DA runs the Anatomy course as per required by the modules of the Beyond 2004 curriculum. The first year of the curriculum is run in two semesters. The first semester runs five modules, beginning with the foundation module FMI. This module, runs over a period of three weeks and accommodates four of the five streams of the curriculum namely Scientific Basis for Medicine (SBM), Communication Learning and Research (CLR,) Doctor in Society (DIS), and Clinical Laboratory Medicine (CLM).

A total of sixty hours are allocated for SBM in FMI. Of the 60 hours 26 hours are taught by the departmental staff.

The Review Team is of the view that:

- the teaching programs are at a suitable academic level.
- even though coverage seems adequate, the reviewers were wondering whether the depth of certain sections is adequate? The DA to pay attention on this matter, at the next review.
- as the program is ongoing it is still difficult to asses its potential and contribution to higher intellectual demands.
- in the curriculum design and content there appears to be sufficient flexibility and choice for the students, for example the elective/selective program .This curriculum and its implementation we understand, is being geared to obtaining finally the SLMC recognition.
- the Review Team observed that this curriculum has interdisciplinary and multidisciplinary elements in the design of content, implementation and evaluation.
- all the objectives of the curriculum are discussed in advance by the entire academic staff prior to submitting to the CCC.

The Review Team feels that this subject review is too premature and that it would be useful to have a formal review after several batches have gone through the subject and also have finished the Medical course.

The Review Team judges the Curriculum Design, Content & Review of the DA as SATISFACTORY.

4.2 Teaching Learning and Assessment Methods

A total of sixty hours are allocated for SBM in FMI. Of the 60 hours 26 hours are taught by the departmental staff. Preparatory work for the 26 hours of teaching runs into several man hours. The teachers are expected to use innovative methods to impart knowledge. They also work as module coordinators, doing the enormous task of time tabling, liaising with the heads to allocate teaching staff, liaising with the Curriculum Coordinating Centre (CCR) regarding inviting visiting lecturers and being responsible for the smooth running of the modules. The current Head of DA and a senior lecturer work as coordinators for FMI and cardiovascular modules respectively. The FMI module contains several objectively structured practical programmes. Student and peer evaluation has shown that the coordination work of the FMI module was commendable.

In the first two semesters, concepts of Anatomy are taught by lectures, student seminars, staff seminars (preclinical departments or pre and clinical departments) objectively structured practical lessons, CAL packages, prosected specimens, student assignments eg. Poster and Clinical Case of Relevance (CCR).

The Review Team observed the presence of qualified and experienced academic staff and trained non academic staff in the DA as a great advantage. Having a "Willed Body Donation" program, enables having adequate number of Cadavers for student learning and prosected specimen preparation for demonstration and preparation of museum specimen to upgrade the museum.

Once dissected, cadavers and parts can be stored for any long period without formalin in the 8 body coolers in the dissecting room. These specimens are used in the teaching and evaluation (OSPE) programms. Sufficient number of X- ray illuminators and radiographs are available for student use. The committee noted that these illuminators had been made by a skilled T.O. The department also provides atlases, bones and skeletons free on charge for student use. Four old computers are housed in the dissecting room for CAL packages. A well equipped histology laboratory with old microscopes are available for students self learning process. The teaching slides are prepared by Technical Officers in the DA and for this purpose a tissue preparation lab is available. The anatomy museum displays a reasonably good number of specimens and models. In addition eight poster boards and twenty Cubical Screens have been made available to students.

Amendments to the Beyond 2004 curriculum, identified Course Directors in the year 2006. Three members from the DA serve as Course Directors. The curriculum revision process also identified three planning and implementation committees. Three members from the DA served in these three committees from the year 2003, and currently four are involved. A summary of the modules and the number of hours of Anatomy teaching is given below;

1st Semester

Module	Total SBM hours	Number of hrs of Anatomy teaching
01. Foundation	60 hrs	26 hrs
02. Blood and Circulation (CVS)	60 hrs	30 hrs
03. Alimentation and Nutrition	80 hrs	30 hrs
04. Respiration and Gas Exchange	40 hrs	24 hrs
05. Reproduction and Excretion	60 hrs	29 hrs

End Semester Examination – two weeks

2nd Semester

01. Nervous Control and Behaviour	80 hrs	49 hrs
02. Endocrine, function, homeostasis metabolism	80 hrs	19 hrs
03. Infection immunity and Barrier Tissues	40 hrs	16 hrs
04. Locomotion	26 hrs	40 hrs
05. Growth development and ageing	20 hrs	------

End semester Examination – two weeks.

Evaluations

The academic staff is involved in formative assessments and end semester summative assessments. The summative evaluation process, conducted at the end of each semester, assesses student knowledge using examination tools such as MCQ and SAQ for theory and objectively structured practical examination (OSPE) parts A and B for practical skills. All confirmed

academic members are involved in making questions and marking the papers. The non-academic members assist in conducting the OSPE. The Head of DA also serves as chief examiner for one module. The spacious halls of the DA are utilized to conduct the OSPE.

The Beyond 2004 curriculum has also identified Elective/Selective programmes at the end of the second semester. The Elective/Selective Programme Committee, through its Coordinators offer selective options. An academic member of the DA who also serves in the Elective/Selective Committee, offered human body dissection as a selective option. The first ever selective programme on human body dissection was conducted from 27th March to 15th May 2006, with the involvement of five academic members of the department.

On this programme seventy students dissected twelve bodies. Six students were allocated for each body, three per side. These students spent five hours every day on the dissections. By15th May they had dissected the entire body. They followed a standard dissection guide, the Grant's Dissector for the dissections. At the end of the programme they produced a portfolio and a report within given guidelines. The department also provided its own report on every student.

The Review Team observed in the student reports about this programme that it was well organized and that it gave them a better 3 D understanding of the subject.

The Review Team feels that it might be a good idea to allow a guided dissection programme for the whole batch in future which will enhance their learning and grasp of the subject.

- The above teaching and learning strategies are well planned and will help to achieve the aims and the learning outcomes of the DA.
- Shift towards student centered learning is encouraging.
- The assessment methods should be suitably balanced for each subject within a module, e.g. in the MCQ paper of the module there seems to be a disproportionate allotment of core subject knowledge. Further, the number of MCQs related especially to Anatomy seems grossly inadequate in relation to the number of hours spent on learning the subject which will need to be looked into.
- The Review Team felt that the students may be successful in the modular MCQ evaluation without passing even one MCQ in a particular subject.
- The Review Team wishes to suggest that MCQ numbers should be adequate to cover the objectives and the test should cover both the core knowledge and the applied anatomy components.
- The Review Team wishes to point out that 'Beyond 2004 curriculum' has been put into place without considering the need for a repeat examination.
- Absence of a title to the semester examination is a draw back. E.g. IBS exam, Colombo Faculty.
- Absence of a bar examination too is a drawback.

On the whole, the Review Team felt that the Teaching, Learning and Assessment Methods adopted by the DA are GOOD.

4.3 Quality of Students including Student Progress and Achievements

Entry criteria to MBBS is based on Z score used by the UGC, and the Review Team notes that they are of high caliber being the most popular course among the bioscience advanced level exam candidates.

The MBBS degree is a five year program consisting of assessments at the end of each year. The DA is responsible in the first two years of the teaching program. Whether proportion of "high achivers" has increased after the introduction of new curriculum compared to the previous curriculum is yet to be seen.

But provisional results of second exam for Medical Degrees August 2005 (Annex 4), shows that there had been seven 1st classes and 47 2nd classes out of a batch of 198 and a total of 16 Distinctions in Anatomy and only19 students getting referred. Without comparing with the result in the old curriculum even, one can without any hesitation say that student achievements are good.

Some positive aspects of student achievements with the introduction of the new curriculum can be listed as follows.

- Learn to work as a team.
- Using intranet facilities for learning at their own pace.
- Scientific thinking, reasoning and Professional behavior beginning to evolve.
- Student generated learning sessions impose responsibility on the student to seek knowledge.

In the opinion of the Review Team, Quality of Students, Student Progress & Achievements can be judged as GOOD.

4.4 Extent and Use of Students Feedback, Qualitative and Quantitative

Student feed back is obtained by the Faculty based Z committee of the Beyond 2004 curriculum. The Z committee informs the Dean of the findings of the feed back. So far, one member of the DA has been informed by the Dean that she was rated by the students as an able and efficient teacher. The CCC is also briefed on student evaluation. The CCC gets its own feed back by student academic meetings. Subsequently, the CCC effects whatever change necessary. The DA maintains a book where the academic members enter their comments after the teaching assignment. At the completion of the module, the comments received are submitted to the CCC office for perusal.

The Review Team observed that CCC was involved in getting feedbacks from the students regarding the performance of the teachers and the curriculum. In addition individual teachers too have been involved in obtaining feed back from students for their personnel development using questionnaires (Ref. under Extent of student feedback in the SER).

The Review Team observed the rapport between the student and staff enabling student views to be freely expressed. The students were happy that staff had responded to the feedback given by them. Students are represented at the Faculty Board and decisions taken at the meetings of the heads of departments and departmental meetings are conveyed to the student body. But Review

Team has noted that student representation at the departmental meeting is not encouraged which is a 'drawback'.

The Review Team judges this aspect as SATISFACTORY.

4.5 Postgraduate Studies

Six members are currently enrolled in postgraduate studies. One senior lecturer and two lecturers have registered to read for PhD. The two lecturers are registered in foreign Universities, whereas the senior lecturer is registered locally. A breakdown of the postgraduate programmes and the number of staff enrolled in these is given below;

PhD	3 (two in foreign Universities)
MPhil	1 (local)
MS Surgery	1 (local)
MD Radiology	1 (local)

One academic member received funding from Karolinska Institute, Sweden, on his own merit to read for his PhD. Another probationary member received six months of training pertaining to his MPhil thesis, in Radiation and Genome Stability Unit (RAGSU), UK. With funding provided by MRC, UK.This candidate has completed his MPhil and is on a PhD programme funded by the Karolinska Institute, Sweden. A scholarship advertised in the faculty and offered by the Norwegian Government, was offered to a probationary member to complete his MSc degree.

Facilities to do light microscopic studies and immunofluorescent studies are available, within the DA. Although the staff is trained in the use of sophisticated equipment and techniques, including electron microscopy, the DA has not had funds to purchase any equipment over the last two decades to allow research in the area of training. Leading funding agencies such as the WHO, encourage funding of community oriented tropical research. The TEM the DA had decades ago is non functional. As such basic science research within the faculty has taken a back seat. Besides, themes of research and research policies are not available for the faculty. The DA has had a long standing tradition of research originating from the times of Prof ADP Jayatilake, even though there had been conflicting personalities in the DA during this period. Furthermore, the DA has lost many leading academics to foreign Universities. The senior academic members of the DA at present are conducting research in Biometric studies and pedigrees of Veddhas, Biometric studies and pedigrees of inhabitants of Purana Villages in Sri Lanka, Innovative methods of teaching anatomy, Down syndrome, Side effects of radiation therapy, neuroscience, and gene expression studies. There are no research themes for the DA. According to the present Head, the capabilities of all members are not pooled. However, with increasing number of qualified staff, the research culture needs to be changed and all senior staff must be encouraged to look for research funding and recruit research students.

- The observations of the Review Team are that for most of the studies, funds have been obtained from University Research Grants.

- There are no post-graduate degree courses or taught post graduates programs conducted by the DA.
- Individual staff members have been involved in supervision of MPhil and PhDs theses and several have been completed successfully.
- There is several junior staff members enrolled in research based post-graduate studies, locally and abroad.
- The DA has been involved in teaching MD/MS part I PGIM trainees for so many years.
- The list of thesis completed in the DA and abroad, from 1962 has been very impressive though not recorded correctly in the evaluation report.
- The list of Publications in local and international journals by the staff of the DA is numerous, which is commendable.
- It is a good practice to acknowledge the research assistance by the technicians when the research is being published and the technician/s are made aware of them.

In the opinion of the Review Team, Postgraduate Studies can be judged as GOOD.

4.6 Peer Observation

Informal type of peer review system seems to have been in place where senior staff have been supervising junior staff, but not vice a versa. Staff members informally discuss the problems arising during academic activities among themselves and the head/Professor of the DA.

Peer observation in setting practical assignments, MCQ construction, essay type question construction or any other teaching modality is available.

There is no formal peer review mechanism in the DA at present or in the Faculty, which is a drawback.

The Review Team judges this aspect as UNSATISFACTORY.

4.7 Skills Development

A wide range of strategies have been adopted for skills development though not highlighted in the SER by the Head.

The Review Team is of the view that the following skills have been developed during the first two years of the MBBS course.

a) ***Communication skills***: The body side tutorials and seminars enhance spoken and written skills in the English language.

b) ***Self learning skills***: Computer Assisted Learning (CAL), Anatomy museum with dissected and preserved specimens, models, Radiographs and Skeletons are being used which help in this process.

Allocation of self learning time slots in the time table can be very useful.

c) ***Critical thinking and ability to apply their knowledge*** to draw conclusions in a systematic manner: Clinical Cases of Relevance (CCR) done by tutors provide the students that skill.

The Review Team judges the Skills Development at the DA as SATISFACTORY.

4.8 Academic Guidance and Counseling

The University of Peradeniya has a student Counseling Committee consisting of a Chairperson and Senior student Counselors from all Faculties. The Faculty of Medicine too has several Counselors probably distributed one for each academic year. There is no student mentor scheme at the Faculty. At the beginning of the course students are informed regarding the course, facilities available, course content, assessment methods, by the staff.

Students who need special guidance on personal problems are encouraged to meet the senior Counselors who may refer them as appropriate. It is also common practice for students to meet any staff in a department when encountered with a problem. In addition to the formal financial assistance available to students, several staff members have organized financial help for needy students. An attempt is made to identify students who need any academic guidance specially after semester assessments. Poor performers during the course too are noted and helped.

The Review Team has noted that the staff is involved in providing academic guidance and counseling even though they have not had any formal training in such skills. .

Most of the staff whom the Review Team has met have been counselors in the Faculty. The Faculty is planning to have a mentoring system in future.

The Review Team judges the Academic Guidance and Counseling as SATISFACTORY.

5. CONCLUSIONS

Based on the observations made during the study visit by the review team, the eight aspects were judged as follows:

Aspect reviewed	Judgment given
Curriculum Design, Content and Review	Satisfactory
Teaching Learning and Assessment Methods	Good
Quality of Students including Student Progress and Achievements	Good
Extent and Use of Student Feedback, Qualitative and Quantitative	Satisfactory
Postgraduate Studies	Good
Peer Observation	Unsatisfactory
Skills Development	Satisfactory
Academic Guidance and Counseling	Satisfactory

The overall judgment is suspended

6. RECOMMENDATIONS

Some of the following suggestions and proposals were transpired at various discussions the Review Team had with all grades of staff and students, thus we thought of recording them for consideration by the authorities.

- Review Team believes better PR of the senior staff can enhance the departmental output and life easier for every body.
- It is recommended to introduce a Faculty policy regarding disbursement of teaching materials to the intranet.
- It is recommended to have regular departmental meetings to address the curricular and other matters pertaining to the department and invite at least two student representatives.
- In the opinion of the Review Team, allowing full body dissection done in a short period as a selective should be discouraged.
- Additional new computers are needed for preparing learning materials for staff and for students in the dissecting room for CAL.
- Undue delays in the promotion of labourer to attendant post need to be addressed.
- The Review Team wishes to draw the attention of the DA to the following concerns of the technical staff:
    - In conducting examinations with the new curriculum Technical Officers in anatomy have complained that the staff of Biochemistry and Physiology departments do not share the work load with them when the combined examinations are conducted in the dissecting rooms.
    - Further they have indicated the non availability of scholarships for upgrading their training and no risk allowance been paid for long durations of exposure to formalin and other carcinogens.
    - They are unaware of the new curricular changes in the “Beyond 2004 program” and what contribution is expected by them. There seems to be a gap in communication.
    - The technical staff is unhappy about the unacceptable practice of permanently transferring the technical staff to other disciplines.
- It is a good practice to acknowledge the research assistance by the technicians when the research is being published and the technician/s are made aware of them.

7. ANNEXES

Annex 1. PROGRAMME FOR THE REVIEW VISIT

Day 1: Wednesday, 2nd August 2006

08:00 am	Convening of Review Panel from Hotel Hilltop to Faculty of Medicine, Peradeniya
09.00 – 09.30 am	Welcome and exchange of formalities with the Dean and Head of *Department Dean's Office*
09:30 -10:00 am	Discussion on the Agenda of the Review with the Head of Department and all staff, Department of Anatomy *Board Room, Faculty of Medicine*
10:00 -10:30 am	Tea for Review Panel and all staff, Department of Anatomy *Board Room, Faculty of Medicine*
10:30 -11:30 am	Consideration of Self Assessment Report by Prof M Indran Sabanayagam, Head, Department of Anatomy *Board Room, Faculty of Medicine*
11:30 -12:30 pm	Discussion - Review Panel and all staff *Board Room, Faculty of Medicine*
12:30 -13:30 pm	Lunch - Review Panel and Head of Department *Staff Common Room, Department of Anatomy*
13:30 - 14:30 pm	Visit to observe core facilities of the Department Review Panel escorted by the Head of Department. *Technical Officers to be present at areas of their main responsibility. Embalming staff to be present at embalming area*
14:30 -15:00 pm	Visit to Medical Education Unit/Curriculum Coordinating Centre Meeting with Director, MEU/CCC Visit to Technical Resource Centre Meeting with Head, TRC *Escorted by Dr Sanajaya Adikari*
15:00 - 16:00 pm	Meeting with the Department Academic Staff *Staff Common Room*
16:00 -17:30 pm	Meeting of Review Panel to identify remaining aspects to be clarified and to finalise tasks for the second day *Computer Room, Department of Anatomy*
17:30 pm	Review Panel to be taken to Hotel Hilltop by Faculty transport

Day 2: Thursday, 3rd August 2006

08:00 am	Convening of Review Panel from Hotel Hilltop to Faculty of Medicine, Peradeniya
09.00 – 10.00 am	Visit to the e-library. Demonstration of intranet we~ based learning facilities for modules pertaining to Anatomy *Escorted by Prof M I Sabanayagam*
10.00 -10.30 am	Visit to the Medical Library - discussion on books available for learning Anatomy with the Librarian *Mrs. Sriyani Perera* *Escorted by Dr Devika Gunasinghe*

10.30 -11.30 am	Observe documents Working Tea for Review Panel *Computer Room, Department of Anatomy*
12.30 -13.30 am	Lunch *Staff Common Room, Department of Anatomy*
11:30 -12:30 pm	Discussion - Review Panel and all staff *Board Room, Faculty of Medicine*
13.30 -14.30 pm	Discussion with Technical Officers *Seminar Room, Department of Anatomy*
14.30 – 15.30 pm	Meeting with minor employees *Seminar Room. Department of Anatomy*
15.30 -16.30 pm	Reviewers private meeting

Day 3: Wednesday, 17th January 2007

9.00 am	Welcome tea
09.00 – 10.00 am	Inspection of dissection room learning facilities - 2005/06 batch
10.00 - 10.30 am	Observation of dissection room teaching
10.30 - 11.00 am	Tea
11.00 - 12.00 noon	Meeting with students of the 2005/06 batch
12.00 - 12.30 pm	Report writing
12.30 - 1.30 pm	Lunch
1.30 – 2.00 pm	Meeting with the 2004/5 batch
2.00 – 2.30 pm	Report writing and Tea

Annex 2. LIST OF FACILITIES OBSERVED

Teaching Facilities

1. Dissecting room
2. Cadaver preparation and embalming room
3. Student histology lab
4. Histology slide preparation lab
5. Anatomy museum
6. Computer facilities

Other facilities

1. Cooling Chambers
2. Plastinization unit (to be established)
3. Bone preparation
4. Prosected specimens

Annex 3. LIST OF DOCUMENTS OBSERVED

1. Beyond 2004 Curriculum Programme

a. Beyond 2004 Programme
b. Time Tables
c. Objectives
d. End Semester Correspondence
e. Staff Rosters
f. Comments & Difficulties of Academic Staff
g. Objectives, Lecture Notes, Practical Handouts, etc..
for Beyond 2004 Curriculum Programme
prepared by
- Dr SB Adikari
- Dr J K Disanayake
- Dr D Gunasinghe

2. Student Matters

a. Students feed back - Human Body Dissection (65 books)
b. Student perception of using different methods to learn anatomy
- Data Analysis & Interpretation
- Raw data
c. Registers - Histology practical conducted from year 1981 to date

3. CCC

a. "X' Modules - June 2006
b. 'X' Committee
c. End Semester Examinations
d. Course Directors.
e. CCC letters - Prof M I Sabanayagam

4. Body Donation Programme;

a. Body Donors Register YEAR 2006
b. Body Donation Programme; - inc. Certificate, Application,
Letters receiving from Body Donors
c. Requesting letters
d. Applications received from Body Donors
e. Register of Cadavers received from 1962 to-date

5. Departmental Matters

a. Minutes - Departmental Meetings
b. Training Programme on Embalming Bodies for Anatomy Staff - Eastern University
c. Duty Leave for Staff Members

Annex 4. SAMPLE STUDENT ACHIEVEMENT (DEGREE AND NUMBERS OF CLASSES AWARDED)

UNIVERSITY OF COLOMBO
SECOND EXAMINATION FOR MEDICAL DEGREES – AUGUST 2005
(Provisional Results Subject to the Confirmation by the Senate)

FIRST CLASS

M 28	Dandeniya	(Miss)	CL	(Distinctions in Anatomy, Biochemistry & Physiology)
M 35	Dharmadasa	(Miss)	DSP	(Distinctions in Anatomy & Physiology)
M 38	Dharmasena		NSI	(Distinctions in Anatomy & Physiology)
M 46	Farah	(Miss)	MMF	(Distinctions in Anatomy & Physiology)
M 90	Karunarathna		JD	(Distinctions in Anatomy & Physiology)
M 153	Seneviratne	(Miss)	SMSP	(Distinctions in Anatomy, Biochemistry & Physiology)
M 157	Sitheeque	(Miss)	F	(Distinctions in Anatomy & Physiology)

SECOND CLASS

M 02	Abeysinghe		AHMCU	
M 14	Bambaranda	(Miss)	BGIK	
M 17	Bandara		MGMA	
M 24	Chandrasekera		GHMDN	(Distinction in Anatomy)
M 25	Chaturanga		VGK	
M 26	Colomage	(Miss)	SDJ	(Distinction in Anatomy)
M 29	Dandeniya		TA	
M 33	De Silva	(Miss)	WMAS	(Distinctions in Anatomy & Physiology)
M 41	Dunukearachchi	(Miss)	SU	
M 48	Fernando	(Miss)	KHSP	
M 51	Gunaratne	(Miss)	CR	
M 52	Gunathilaka	(Miss)	KMAPM	
M 55	Hameed		MS	
M 60	Herath		MP	(Distinction in Physiology)
M 61	Herath		PAHMMBB	(Distinction in Anatomy)
M 63	Hewapathirana		HLI	(Distinctions in Anatomy & Physiology)
M 65	Iddamalgoda		PB	
M 66	Illeperuma		SK	(Distinction in Physiology)
M 73	Jayasena	(Miss)	RAJN	
M 74	Jayasinghe	(Miss)	HMAU	(Distinctions in Anatomy & Physiology)
M 79	Jayasundera		JM	
M 85	Kalhari	(Miss)	ST	
M 86	Kaluarachchi	(Miss)	VTS	(Distinction in Physiology)
M 89	Karunarathna	(Miss)	D	
M 91	Karunathilake		PRWMMS	
M 94	Kumarsiri		DTS	(Distinctions in Anatomy & Physiology)

SECOND CLASS

M 97	Kumara		BMB	
M 103	Liyanage	(Miss)	ULNS	
M 105	Ladhushani	(Miss)	KPL	
M 108	Madurawala		SCB	
M 114	Nawarathna		NJ	(Distinction in Anatomy)
M 118	Pathirana	(Miss)	HPU	
M 123	Pothupitiya	(Miss)	PKD	
M 130	Ranasinghe	(Miss)	RASS	
M 132	Ranga		MAD	(Distinction in Anatomy)
M 133	Ranmohottige	(Miss)	USN	
M 135	Rarthnayake	(Miss)	DRMMS	
M 146	Samarasinghe	(Miss)	SHMEC	
M 154	Shihara	(Miss)	MHF	(Distinction in Physiology)
M 160	Sundararajah	(Miss)	M	(Distinction in Anatomy)
M 162	Thenuwara	(Miss)	GB	
M 164	Tilakaratne	(Miss)	YGRKK	
M 167	Udugoda	(Miss)	WMDDK	
M 173	Weerakoon	(Miss)	DN	
M 175	Weerasinghe	(Miss)	MDVS	
M 182	Wickramasinghe	(Miss)	WGT	
M 190	Wimalarathna	(Miss)	NTN	

PASS

M 01	Abeykoon	(Miss)	AMEI
M 04	Adhikari		AMCWB
M 06	Adikari	(Miss)	AMLM
M 07	Agalawatta	(Miss)	SMLK
M 09	Akmeemana		AOMS
M 10	Amarasinghe	(Miss)	NGMM
M 11	Ambanwala	(Miss)	AMAS
M 12	Ananda	(Miss)	MND
M 16	Bandara		KIS
M 18	Bandara	(Miss)	WMYS
M 20	Bodhinarayana		TN
M 22	Buddhika		RMP
M 23	Chaminda		ORJ
M 27	Cooray	(Miss)	WDT
M 31	De Silva		NSN
M 36	Dharmadasa	(Miss)	WMCG
M 37	Dharmaratne	(Miss)	HDNIC
M 42	Edirisinghe	(Miss)	ENB
M 43	Egodawaththe	(Miss)	NS
M 45	Emithiyagoda	(Miss)	GAMDK

M 47	Farvin	(Miss)	MAF
M 50	Godamunna	(Miss)	AUK
M 53	Gunatilake		AGPG
M 56	Hapuarachchi	(Miss)	HASA
M 57	Hemamali	(Miss)	KAC
M 62	Hewage	(Miss)	TU
M 64	Hewavitharana		SD
M 67	Indrajith		DS
M 68	Indrakumar		T
M 75	Jayasinghe		JATS
M 81	Jayawardana		JMPR
M 82	Jayaweera	(Miss)	PMED
M 83	Jothipala		PASD
M 84	Kahingala		BD
M 87	Kanchana	(Miss)	KP
M 88	Kanchana	(Miss)	SADJ
M 92	Karunatileke		CT
M 93	Kodikara		AS
M 99	Kumara		PHSS
M 100	Kumari	(Miss)	WMSK
M 101	Lakmini	(Miss)	MGN
M 102	Liyanagama	(Miss)	DP
M 104	Madahapola		MWDB
M 107	Maduranga		JTS
M 109	Mallawwarachchi		RP
M 112	Mohamed		HMI
M 113	Mohottala		KBW
M 117	Panagala		AR
M 119	Pathirana		LPKJ
M 120	Pathiratne	(Miss)	ASR
M 121	Perera		MNJM
M 122	Pieris		KCD
M 124	Prasad		MDRR
M 125	Priyadarshini	(Miss)	S
M 126	Priyadarshana		UGAK
M 128	Rajapakse		RMRB
M 129	Rajapakshe	(Miss)	RGAI
M 134	Rathnayaka	(Miss)	RMTC
M 136	Rathnayake	(Miss)	RGIS
M 137	Rifai		MRAM
M 138	Rimsa	(Miss)	MRF
M 142	Rupasinghe		BP
M 143	Rupasinhe		RPS
M 144	Sajeewika	(Miss)	UAAA
M 147	Samaratunge	(Miss)	LGVC
M 148	Sampath		GLR

M 152	Senani		MADB
M 155	Sirisena		PLA
M 156	Sirisena	(Miss)	PWMSS
M 158	Somarathna	(Miss)	CK
M 161	Suruwa	(Miss)	MMD
M 172	Weerakkody	(Miss)	IR
M 174	Weerasekera		WMCNB
M 177	Weligalle		LC
M 179	Weragoda	(Miss)	WARV
M 180	Wickramaratne		WLD
M 181	Wickramasinghe	(Miss)	WCP
M 183	Wickramasinghe		WMHGSB
M 184	Wijayawickrama		EC
M 185	Wijekoon		WMGC
M 188	Wijesundara		DMGC
M 191	Yapa		MMAB
M 192	Bandara		SWGMCS
M 193	Basnayake		BMNKT
M 196	Kumara		KMPP
M 197	Mirja		MF
M 198	Shantha		KDAU

<u>REFERRED</u>

M 05	Adikaram		RT	(Anatomy, Biochemistry)
M 15	Bandara		DGRP	(Anatomy, Physiology)
M 21	Buddhika		MSC	(Physiology)
M 30	De Silva	(Miss)	KWS	(Biochemistry)
M 32	De Silva		PHIM	(Biochemistry)
M 39	Dissanayake	(Miss)	DMGN	(Biochemistry)
M 40	Divarathne		KDWMHRB	(Biochemistry)
M 49	Galhenage	(Miss)	MN	(Anatomy)
M 58	Herath	(Miss)	HMAL	(Biochemistry)
M 59	Herath	(Miss)	HMCBK	(Anatomy)
M 69	Jayakadu		JMAI	(Biochemistry)
M 70	Jayalath		APAN	(Anatomy, Biochemistry)
M 76	Jayasinghe		JATT	(Biochemistry)
M 78	Jayasooriya		JALA	(Biochemistry)
M 80	Jayatilaka		GS	(Anatomy, Biochemistry)
M 95	Kulathunga		TKDK	(Anatomy)
M 106	Madugoda		DB	(Biochemistry)
M 111	Medagedara		SC	(Biochemistry)
M 115	Nayanthi	(Miss)	HLI	(Biochemistry)
M 116	Nuwan		GHDBS	(Biochemistry)
M 127	Rajakaruna		KDLMP	(Anatomy)
M 139	Riyas		MHM	(Anatomy)

M 140	Rizwan		MCM	(Biochemistry)
M 141	Ruparatne	(Miss)	WPAA	(Biochemistry)
M 149	Sampath		MMC	(Biochemistry)
M 150	Sampath		NMD	(Anatomy, Biochemistry)
M 151	Sanjeewa		KP	(Anatomy, Biochemistry)
M 163	Thilakarathna		UANP	(Biochemistry)
M 165	Ubeyrathna		SR	(Anatomy, Biochemistry)
M 166	Udagedara		UWVB	(Anatomy)
M 168	Umayanga		JMDI	(Anatomy, Biochemistry)
M 170	Wasala		MHWMSA	(Anatomy)
M 171	Weerabahu	(Miss)	WMSK	(Anatomy)
M 178	Welikala		AM	(Anatomy)
M 186	Wijerathna		WGHS	(Anatomy)
M 187	Wijesinghe		WMJB	(Biochemistry)
M 189	Wijewardane	(Miss)	KS	(Anatomy, Biochemistry)
M 194	Fawasa	(Miss)	MZF	(Biochemistry)
M 195	Kantheeban		V	(Biochemistry, Physiology)