

Quality Review Report

Department of Anatomy

Peer Review Group

Professor B. Jennings, Department of Chemistry, UCC (Chair)
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Brief Description of conduct of site visit

The site visit was conducted over 2.5 days from 19th – 21st January 2004 and included meetings with

- i) Head and staff of the department as a group and individually
- ii) Representatives of undergraduate and postgraduate students
- iii) Representatives of employers, past graduates and other external stakeholders
- i) Professor M. Aidan Moran, Registrar & Vice-President for Academic Affairs
- ii) Professor J. Kevin Collins, Vice-President for Research Policy & Support
- iii) Mr. Michael O’Sullivan, Vice-President for Planning, Communications Development
- iv) Professor Eamonn Quigley, Head, School of Medicine, Faculty of Medicine & Health
- v) Professor Paul Giller, Dean, Faculty of Science
- vi) Ms. Carmel Cotter, Finance Office

and visits to departmental and library facilities in UCC.

An exit presentation of the principal findings of the Peer Review Group was made to staff of the department in the afternoon of the second day.

Description of Department of Anatomy

Head of Department: Professor John Fraher

No. of Staff: 7 full-time and 3 part-time academic staff, a prosector, 3 technicians, 2 part-time senior medical demonstrators, an executive assistant, an operative, and a house attendant

Location of Department: Windle Building & Biosciences Research Institute

Degrees/Diplomas offered: BSc, BSc (Neuroscience), MSc, PhD,

No. of Students: Department has 163 Student FTEs: 149 UG and 14 PG FTEs distributed as follows:

Year 1	Year 2	Year 3	Year 4	Visiting American	Total U/G	Master Taught	Master Research	PhD	Total P/G
74	55	6	12	1	149	1	-	13	14

Mission Statement For Clinical Disciplines

“To maintain the importance of *understanding the structure of the living body* at the forefront of clinical medical, dental, nursing and therapeutic practice, thereby enhancing the quality and efficiency of patient care in the Munster region and further afield.”

Aims & Objectives

- Further develop the undergraduate anatomy courses around a central core of minimal factual content

- Emphasise principles
- Expand educational bridges between anatomy teaching and both clinical undergraduate and continuing medical education
- Define accurately and deliver core curricula in Anatomy to Medical, Dental, Dental Hygiene, Nursing and Therapies students

Mission Statement For Science

“To develop Neuroscience education at both undergraduate and postgraduate levels as a national and local resource.”

Aims & Objectives

- Continually modulate the undergraduate degree programme structure
- Establish a joint appointment between Anatomy/Neuroscience and clinical neurology and neurosurgery.
- Deliver teaching within a research-led environment.
- Provide students with a broad background in Neuroscience.
- Provide laboratory/practical training within Neuroscience.
- Encourage students to develop oral, written, numerical, visual, presentation and collaborative skills appropriate to a wide range of employment.

Generally, to:

- Provide a supportive environment for students.
- Encourage students to develop skills for the acquisition, use and evaluation of information.
- Develop in students a critical approach to scientific study.
- Provide opportunities for training and research.
- Encourage learning by curiosity and exploration and so impart an awareness of the importance of lifelong learning.

Mission Statement For Research

“To further develop Neuroscience and Reproduction research activity and substantially enhance funding acquisition.”

Aims & Objectives

- Extend fields of neuroscience activity further into cellular and molecular biology, biochemical and genetic fields
- Increase research income, participate in and lead SFI approaches in the *life and death of cells* initiative
- Continue to ensure that graduate students are trained in knowledge, skills and attitudes to enable them to pursue advanced postgraduate research

- Extend interdisciplinary research collaboration further, both locally within BSI, UCC (with Physiology, Biochemistry, Surgery, Medicine), nationally and internationally.
- Develop the Microscopy and Image Analysis Lab in the BSI as a resource at departmental, BSI, National Neuroscience Network [NNN] and European Neuroscience Network [EURON] levels in advanced confocal, light and fluorescence microscopy and morphometry (including stereology). This resource will be used for research and training.
- participate in the BSI postgraduate training initiative, including development of a formal pre-MD/PhD masters programme in a range of research methodologies, techniques and surrounding concepts for medical and dental graduates.

Objectives common to all degree programmes are that by graduation students should:

- Have acquired a broad knowledge of their subjects with detailed knowledge in selected areas.
- Have acquired skills in observation and measurement.
- Be able to demonstrate the ability to acquire analyse critically evaluate and present subject related information.
- Have acquired computing skills sufficient to aid data manipulation and analysis and report presentation.
- Have undertaken research-based study.
- Have experience of working in collaboration to resolve problems.
- Be able to use oral written numerical and presentation skills effectively.
- Be qualified for employment in the graduate employment market or to pursue postgraduate training

General Comment on Quality Review

The reviewers noted that the Self-Assessment Report did not completely follow the guidelines as laid down by the University and that the department had not fully engaged in all aspects of the process prior to the visit of the reviewers. The reviewers had the impression of a document prepared in haste. Nonetheless a clear view of the department's strengths and weaknesses was apparent to the reviewers. The panel felt that it had all the documentation needed to make a proper evidence-based assessment, although some of this had to be supplied during the site visit upon request from the reviewers. The review achieved a comprehensive picture of strengths, weaknesses and reputation of the department.

Strengths: The view of the panel is that the staff of the Department are very committed to delivering high quality teaching and that staff-student relations are very good. The panel agreed with the Department that the B.Sc. Neuroscience Degree is a major strength. The Department is to be applauded on playing the lead role in developing this programme which provides good quality education and training in this important and developing area. This programme also provides the Anatomy Department with a pool of good quality graduates to

support its research which has undergone a marked expansion as a result. The panel felt that student numbers on the Neuroscience B.Sc. programme should be increased if possible.

The quality of the students studying in the department is high and the reviewers agreed that there is diversity within the narrow scope of the research undertaken by the staff of the department. The reviewers noted the recent expansion of the space available to the department and perceived this to be a strength for the department for the next few years. The panel were agreed that the members of the department are committed to developing the research activity of the department and are on an upward trajectory. The timely move to the BioSciences Institute is very important in supporting the department in their development.

Weaknesses: The department has perhaps tended to be somewhat traditionalist in their view that activities such as quality assurance are not of central importance. In a department which is undergoing rapid changes it is often difficult to see where advantages may accrue from the auditing of the process involved. However, as the process was worked through, it was clear the department was becoming fully engaged in the operations and discussions. The panel was in no doubt that the fundamentals of good teaching and good research are central to the ethos of this department.

The teaching and assessment loads of the academic staff of the department are very high and this is a weakness that should be corrected. The lack of involvement of staff in the formal process of decision-making in the department as identified in the SWOT is a weakness. The department has poor student/staff ratios and limited teaching using IT resources. Presently the department has not developed to a significant level the use of modern technology due to lack of resources.

The quality of space in the Windle Building is poor (unlike that in the BioSciences Institute) and the teaching laboratories and departmental rooms need renovation. The Windle lecture theatre is now too small to properly accommodate the medical classes.

Opportunities: The PRG agreed with some of the of the opportunities as perceived by the department. The principal opportunities identified by the panel were the possibility of expansion of the Neuroscience Degree programme, further consolidation of departmental research activities in the BioSciences Institute, further development of research funding including collaborative ventures, and in medical post-graduate education.

Threats: The Department is resourced entirely through the Faculty of Medicine & Health, but the Neuroscience Degree is based in the Faculty of Science and sources its students from the Biological Sciences pool. Although the scheme has worked reasonably well to-date, it could potentially lead to tensions over student FTEs and funding. Additionally the manner in which the Medical Faculty allocates resources to the Department does not seem fully transparent. The PRG felt that it would be better for strategic development if the Department could have real control over the finances available to it.

The PRG determined that staff members feel uncertainty about the provision of adequate space for their research activities in the medium term due to other demands for space in the BioSciences Institute. A guaranteed tenancy period would be helpful if feasible. However, the PRG were reassured by the Vice-President for Research Policy & Support that research active Anatomy staff need have no concerns about losing their research space in the BioSciences Institute.

The PRG noted the threats on quality arising from increasing administrative and teaching loads on the staff. The panel were of the view that the Department urgently requires additional administrative assistance (one new post) and a further member of academic staff.

The external experts felt that the dissecting room teaching provided by the Department was of high quality. There is an educational philosophy which tends to underestimate the value of dissection in medical training and urges its abandonment. The external experts urged that this should be resisted and that dissection by students be encouraged and supported.

Benchmarking: The issue of benchmarking was not addressed in the Self-Assessment Report prepared by the department, nor was the issue addressed by the Department during the visit.

Progress on Implementation of Recommendations for Improvement

A meeting to discuss progress made in implementing recommendations for improvement arising from the review of the Department of Anatomy was held on 20th January 2006.

Present: Professor J. Fraher, Head, Department of Anatomy
 Professor M. Murphy, Dean, Faculty of Medicine & Health
 Professor P. Fitzpatrick, Acting Head, College of Science, Engineering & Food Science
 Dr. N. Ryan, Director of Quality Promotion

Abbreviations

PRG: Peer Review Group

QPC: Quality Promotion Committee

M&H: Medicine & Health

QP: Quality Promotion

QIP: Quality Improvement Plan

HR: Human Resources

SEFS: Science, Engineering & Food Science

Recommendation of PRG	Recommendation of QPC	Follow-up Report January '06
That more research income should be generated	Endorsed. QPC requested that specific details be provided in QIP. Recommended that Department should look further than SFI sources for research funds.	Department has been successful in attracting more research grants and since the review has received one SFI grant. Staff have set up interactions with industry and has two PhD students funded by drug companies. The orientation of the research of staff is moving towards applied research, but there is still a significant amount of basic research. Integrated research in the area of biomedicine is developing and income generation is improving.
That the numbers of students in the BSc Neuroscience Degree programme should be increased	QPC would encourage Department to consider increases in numbers of students in programme. QPC recommended that the Head of Department discuss the issue of resources with the Deans of Science and Medicine & Health	In 2005/06 an additional three students were admitted into the BSc Neuroscience Degree Programme. All agreed that the quota of 15 should increase and that there is interest from high quality students in the programme. However a significant increase in the numbers would require additional resources, including

Recommendation of PRG	Recommendation of QPC	Follow-up Report January '06
		staffing and space. This is the only primary degree programme belonging to the department and the department would aim for a quota of 25 students per year.
That the Department cut total hours of teaching by at least 15%. In particular, the department should review the balance between lectures, tutorial and practical sessions and should make greater use of computer and web-based teaching such as 'Blackboard.com'.	Endorsed by QPC. QPC would encourage the Department to continue seeking ways of improving the teaching and of expanding the methodologies used in teaching and learning. The QPC did not endorse the recommendation on additional resources.	The Department has made some progress in this regard and has combined some lectures in the professional degree programmes where possible. This has increased efficiencies. The introduction of the revised Medical curriculum has resulted in a reduction in the numbers of lectures, some of which have been replaced by more directed intensive small group teaching. The department has increased the availability of electronic resources to support the students. The Head of Department commented that despite encouragement, student usage of these resources has been somewhat disappointing. The Dean of Medicine & Health expressed his concern that students would continue to be encouraged to use them.
That the Department re-distribute teaching loads, particularly for those whose loads are excessive and those with heavy research commitments.	Endorsed. QPC requested specific details of the redistributions and reductions in teaching loads to be included in the QIP. QPC noted that action on this recommendation is not dependent on an additional staff member being appointed.	Implemented. The department has also increased the number of Visiting Lecturers with expertise in specialist areas.
That the Department cut assessment/examination loads for the benefit of both staff and students (although students should have more formative tests on 'Blackboard.com').	Endorsed.	Implemented. The introduction of the new medical curriculum has changed assessment loads and methodologies. To reduce the load the

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		<p>Department has introduced examinations by MCQs and short answer questions only for programmes in Medicine, Dentistry, Pharmacy, Nursing and Clinical Therapies. Concern that this may be regarded as educationally unsound was expressed by both Head and Deans and was confirmed to be due to a lack of resources.</p>
<p>That the Department organise formal staff meetings. Such meetings should include academic and non-academic members of staff</p>	<p>Endorsed. QPC requested specifics of composition and frequency of meetings to be included in the QIP.</p>	<p>Implemented.</p> <p>All staff meet twice per year. Academic staff meet four times per year and on an ad hoc basis as necessary.</p>
<p>That the Department establish a formal staff/student committee in line with University regulations and more effectively use student questionnaires.</p>	<p>Strongly endorsed by the QPC.</p>	<p>Implemented.</p> <p>The class representatives report back the outcomes of the meetings to students. It was suggested that perhaps the minutes should be posted on the departmental notice board as per Academic Council recommendation. It was also noted that each School in the College of Medicine & Health has a School Staff:Student Liaison committee. The Head of Department expressed his concern that feedback from some of the School Staff:Student Liaison Committees is not forthcoming to the Department. The Dean of the College of Medicine & Health undertook to examine the concerns and to seek to rectify the operational procedures of the Schools to ensure adequate communications on all sides.</p>
<p>That the Department ensure, as far as possible, that the end-of-year assessments/examinations and the re-sit examinations have similar formats. In addition, the markings systems</p>	<p>QPC requested the Department to consider actions on this recommendation.</p> <p>The QPC noted in particular</p>	<p>Implemented.</p> <p>The Department confirmed that the end-of-year examinations and the re-sit examinations have similar formats. The marking</p>

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used for objective assessments (such as MCQs) should be critically re-evaluated.	the reference to the marking scheme for MCQ examinations and specifically requested the Department to respond on actions to be taken before October 2004. The QPC recommended that a common protocol for the marking of MCQ examinations be applied across all subjects in a programme.	scheme for MCQs is now the same for all the preclinical sciences.
That the Department improve the clarity of course objectives/learning outcomes and the organization of the professional courses that are allied to medicine.	QPC endorsed the findings and recommendation of the PRG.	Implemented. The Department confirmed that learning outcomes are clearly defined. See commentary under recommendation 12 below in the interactions and engagement of the Department with the Schools in the Faculties of Medicine & Health and Science.
That the Department ensure that, where dissecting room teaching is undertaken, that the skills-base is as well developed as the information-base (e.g. for the understanding of ethical and death-related issues; the understanding of biological variation; the evidence of pathology seen in the cadaver)	QPC endorsed recommendation. QPC suggested that the use of Computer-Aided Learning be considered by the Department.	The Department does not accept that this is an issue and confirmed that guidance on all necessary skills and information is given to the students.
That the Department improve liaison with the University Library and I.T. services in order to optimize the resources related to Anatomy and to encourage the development of Teaching and Learning Resources Centres in the University	Endorsed by QPC.	Implemented. Another different staff member has been appointed to conduct the liaison with the Library and IT services and there has been improvement in the liaison.
That the arrangements for reporting within faculty structures be reviewed and re-considered	QPC referred this recommendation for consideration by the Faculty of Medicine & Health, with	The situation is different for the individual Schools within the Faculty of Medicine & Health. There is excellent interaction and

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	<p>the request that the issue of participation and input of the pre-clinical departments in the Schools in the faculty be particularly considered. The appropriate representation of these departments at faculty level should be reviewed.</p> <p>QPC requested that the Director of QP meet with the Deans of Science and Medicine & Health and the Head of the Department of Anatomy to discuss issues and the relationship of the Department with Science and Medicine</p>	<p>discussion with some Schools (Clinical Therapies, Medicine, Pharmacy) and almost no interaction with others (Dentistry, Nursing). Of particular concern was the absence of almost any engagement in academic discussions with the Schools of Dentistry and Nursing & Midwifery.</p> <p>The membership of the School Boards varies in each case and there is not an agreed modus for operation of the Schools across the Schools.</p> <p><u>Recommendation 1:</u> That the Faculty of Medicine & Health consider forming two new Schools: A Medical School comprising the nine clinical departments and A Biomedical Sciences School, comprising the basic Science departments. IN the event of such a School being formed it should be a joint one and would cross over between the College of SEFS and the College of M&H.</p> <p><u>Recommendation 2:</u> that each School in the Faculty of Medicine & Health should set up a School Board and a School Executive, with representatives of the other Schools on the School Board determined according to an agreed formula, and appointed according to agreed procedures.</p> <p>It was also agreed that it is critical that each discipline is well-represented in its direct reporting line and that research is a core part of the functions of each School. Research Institutes are major drivers of research. Schools must also facilitate research. Complementary research interactions between</p>

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		<p>Institutes and Schools are beneficial to both.</p> <p>It was also noted that the Department has full engagement with the Biological Sciences Committee in the Faculty of Science.</p>
<p>That the University improve departmental buildings and facilities within the Windle Building. In particular, and as a matter of priority, the panel recognises that the large Anatomy Lecture Theatre should be refurbished and extended since its capacity is exceeded by present student numbers in the medical class.</p>	<p>The QPC noted that there is a fund-raising drive for the refurbishment of the Windle Building ongoing. The QPC noted the historical importance of the building, and that this might be an angle to be used in the fundraising and referred the issue to the Dean of Medicine & Health</p>	<p>The Dean of Medicine & Health confirmed that there is a need for cohesive planning of new accommodation for pre-clinical biomedical sciences (in particular Anatomy, Biochemistry, Pharmacology and Physiology), and that this is an issue for the University and the Colleges of Medicine & Health and Science, Engineering & Food Science.</p> <p>The very poor condition of the Windle Building was acknowledged, along with the lack of suitable offices for some staff. It was confirmed that refurbishment of the Windle Building is on the list of priorities for the Buildings Committee, but awaits money for action.</p>
<p>That the University improve the complement of academic staff within Anatomy. The panel recommends that an existing temporary, full-time academic post should be converted to a permanent full-time post and, in addition, a new permanent full-time academic post should be created.</p>	<p>The QPC noted this recommendation and referred it for consideration to the Dean of the Faculty of Medicine & Health and the Director of Medical Education</p>	<p>Discussions have taken place. The existing temporary full-time academic post has been converted.</p> <p>The new post was not sanctioned. One replacements post is being put in place for one of the two staff who have resigned. It is a strategic decision by the College of Medicine & Health to delay filling of any new posts until the next Chair is appointed. The other vacant post is filled by temporary full-time contract staff at the present.</p>

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<p>That the University increase secretarial/administrative staff within the Anatomy department to two</p>	<p>The QPC noted this recommendation and referred it for consideration to the Dean of the Faculty of Medicine & Health and the Director of Medical Education</p>	<p>Not implemented.</p> <p>The Dean of Medicine & Health confirmed that the strategy of the College is to change the relationships between departments and Schools so that as many administrative functions as possible are transferred to the School administration. The Schools have very significant administrative support. Where administrative support has been put in place, the Department is recommended to use that support, for example in administration of MCQs, examinations, etc. It was agreed that the integrity of individual disciplines be maintained.</p> <p>An analysis of the administrative support in the College was conducted some three years ago and found that overall the College is very well supported.</p>
<p>That the University consider directly devolving budgets to the departmental level</p>	<p>Not endorsed by QPC. Devolving budgets directly to Departments is not university policy. The QPC recommended better communication of the budget and how it is assigned from the Faculty to the Department. The issue should be raised in the discussions with the Deans on recommendation 13.</p>	<p>The University has devolved budgets to the four Colleges and this structure will remain in place. Budgets will not be devolved to departmental level from the University.</p>
<p>That the University consider provision of skills training for technical, as well as administrative, staff.</p>	<p>The QPC endorsed recommendation and has requested that the Department of HR discuss the issue of appropriate training for technical staff with the Department.</p>	<p>Some departmental support has been provided for training and development of technicians. This is an issue that needs to be addressed at the level of the University as there are efficiencies in organising and implementing such training at University/College levels.</p> <p>Work will continue to develop such training.</p>

