Panel C Report

Occupational Science and Occupational Therapy

Units in Panel C
School of Clinical Therapies; Occupational Science and Occupational Therapy
School of Clinical Therapies: Speech and Hearing Sciences
University Dental School and Hospital
Oral Health Services Research Centre (OHSRC)
School of Nursing & Midwifery
School of Pharmacy

Panel C members
Chair: Dr Audrey Bowen,
University of Manchester
DVC for Occupational Science and Occupational Therapy: Associate Professor Kate Radford,
University of Nottingham
DVC for Speech & Hearing Sciences: Professor Karen Bryan,
Sheffield Hallam University
DVC for Dental School: Professor Paul Speight,
University of Sheffield
DVC for OHSRC: Professor Gail Douglas,
University of Leeds
DVC for Nursing: Dr Tony Ryan,
University of Sheffield
DVC for Pharmacy: Professor Yvonne Perrie,
Aston University

Scope and content of the review

On 3 November 2014 the Chair attended the first site visit to UCC with the Chairs of seven other Panels. Issues discussed included the need for Panels to develop discipline specific guidelines and agree fair and transparent means of adjusting expected returns from part-time working. Chairs from the UK raised awareness of the Athena Swan charter.

On appointment, the six DVCs guided and moderated the work of remote reviewers who rated submissions for RAIs 1-3. Two external reviewers reviewed each staff member’s submission. DVCs ensured reviewers had no conflicts of interest. The DVC moderated reviewers’ scores paying particular attention to any areas with wide discrepancies. DVCs themselves initially rated RAIs 4-6 based on statements submitted by UCC units and by viewing online profiles and other online sources of information.

The second site visit was attended by the Chair and five of the Panel members from 30 June - 2 July 2015 inclusive. The DVC for Nursing and Midwifery was unable to travel to Ireland for health reasons but participated fully by teleconference and email on each of the three days. Each DVC had prepared and circulated to the Panel in advance of the site visit, a draft report on the unit for which they were responsible. At the site visit the Panel agreed all marks and final reports through discussion, meetings with senior UCC staff and most helpfully through visiting the units and their staff and students. The Chair and the DVC for Pharmacy visited Nursing and Midwifery.

In two separate sessions on 2 July the Panel members gave brief verbal feedback on:
1. The process itself (to members of the Steering Committee and the Quality Promotion Unit).
2. The commendations for each unit and then overarching recommendations for the Panel to representatives from each of the six units reviewed.

Considerable time was spent examining and moderating the marks for RAIs 1-3 provided by the remote reviewers. Where two reviewers had disagreed on marks the DVC reviewed those outputs and sought the Panel’s approval for their recommended final mark. A second key concern was the fair and transparent application of discipline specific norms/benchmarking. These related to RAIs 1-6 but also for RAIs 1 and 2 such as where units were staffed with a large proportion of early career researchers and for professions that until recently do not typically have doctoral level academic staff e.g. nursing and allied health professions. The third main issue concerned agreeing expected outputs for staff with extenuating circumstances. The Panel agreed that where more outputs had been submitted than were required (e.g. if someone submitted five for RAI1 when only required to submit two based on extenuating circumstances) the Panel would select those with the highest ratings. The Panel agreed not to use zeros for legitimately absent scores but instead to enter that person’s average. The Panel considered both means and medians but the specific choice made no material difference in any of the ratings considered.

The Panel was satisfied that it had been provided with adequate information to provide a fair report. Following the second site visit, the Chair drafted the current report, which incorporates the following revised individual unit reports.

Introduction

Occupational Science and Occupational Therapy is a small Department. It includes eight listed academic staff and one Emeritus Professor.

UCC is one of four colleges in the Republic of Ireland offering training in Occupational Therapy leading to professional registration. The 4-year occupational therapy undergraduate programme, which launched in 2003, is accredited by the Association of Occupational Therapists in Ireland (AOTI) and the World Federation of Occupational Therapists. Masters and doctoral programmes both taught and by research are also available; subsequently staff have relatively high teaching loads. The emphasis is on teaching ‘underpinned by research’ evidence. Several members of staff have been awarded the UCC President’s Award for Excellence in Teaching.

There is evidence of a growing research culture and a clear commitment to research and research capacity development, including initiatives to engage the local clinical community, undergraduates and wider public. Part of the School’s research strategy is for staff to develop collaborative networks nationally and internationally, which is evident in most OSOT staff.

RAI 1 – Selected published output

Six members of staff were included and reviewed for selected outputs (five Category A and one Category B). Two staff were excluded rather than entered as nil
returns, due to the non-research nature of their post or prolonged period of absence. Each included member was required to submit five papers. One person had extenuating circumstances and so was reasonably expected to submit two papers.

A total of 27 papers were sent for review. The review Panel found some evidence of high quality work that would compare favourably with international standards. Eleven percent of outputs were considered to be excellent, 13% were considered to be very good, 26% good, 19% fair and 31% poor.

The selected published output of the Department has been demonstrated to be of a good standard.

**RAI 2 – Total published output**

The group collectively published 49 peer reviewed publications and delivered over 120 conference presentations in the review period (not all research). There was considerable variation in research output and research activity between staff members as might be anticipated in a small group with a substantial teaching commitment and high proportion of early career researchers.

The number of peer reviewed outputs translates to approximately one per reviewed academic staff member per year. However, the distribution of effort is uneven; some being far more productive. Research quality reflects the relative infancy of some staff members and the grant income. Only one member of staff was judged to have a total research output at the highest international level.

Seventeen percent of the total published output was considered to be excellent, 8% very good, and 17% good. Most of the published output was rated as either fair (33%) or poor (25%). Given that all except two were identified as early career researchers within the review period, the Panel agreed that the unit’s publication rate was fair.

The total published output of the Department has been demonstrated to be of a fair standard.

**RAI 3 – Peer esteem**

OSOT staff have a number of esteem indicators including considerable career publication output, invited plenaries at significant disciplinary conferences and honours including awards for professional practice, teaching and research. Most have at least one national Panel role, and a mixture of research and teaching committee roles at UCC. Most peer review for professional journals and national and international conferences. Several have represented the Association of Occupational Therapists in Ireland (AOTI) at both national and European meetings. This activity reflects the clinical and research expertise of the staff.

One area where experience is lacking is external examination, however, this reflects the high proportion of early career researchers.

Seventeen percent of the peer esteem activity was considered to be excellent, 17% very good, 25% good, 33% fair and 8% poor.

The peer esteem activity of the Department has been demonstrated to be of a good standard.

**RAI 4 – Research-related activity**

There is very good evidence of research-related activity including national and international collaboration and co-authorship of publications and research grants. Three staff who trained or worked overseas maintain international links but there is also evidence of new overseas collaborations.

Inter- and intra-university collaboration is evidenced by recent bids with institutions in Ireland and Sweden and strong links with the Institute for Social Sciences in the 21st century (ISS21), which position staff well to benefit from strategic funding applications, COST initiatives and national grants.

There is evidence of external engagement with voluntary and community organisations in the identification of student research topics (e.g. CARL) and collaborative interdisciplinary partnerships with clinicians that support pilot work to pump prime further research in the area of Lifestyle redesign.
Other activities include specialist training provision such as Lifestyle Design Training (awarded competitive funding) which has invited further presentations and workshops across Ireland and throughout Europe and ‘Research in Practice’, which is intended to equip therapists working in clinical practice with the knowledge and skills required to complete practice-based research in their clinical setting. These activities engage the local practicing clinical OT community and attract new postgraduates.

The research-related activity of the Department has been demonstrated to be of a very good standard.

**RAI 5 – Postgraduate research education**

Postgraduate research student numbers have increased across the School of Clinical Therapies (OSOT and SHS) since the last RQR, with a total of 26 PhD/MRes students registered in the past six years - this represents a threefold increase since the previous RQR. The School now runs a Doctor of Occupational Therapy (DOccT) degree, with one student completed in the current RQR period. There has also been a dramatic increase to 11 MRes students (nine in OTOS) in the 2014-15 academic year.

Since the appointment of the current head there has been a successful drive to ensure existing staff complete their PhD. Four staff members gained a PhD in the review period and two have gone on to generate research income and supervise postgraduate research students.

There is evidence of success in obtaining prestigious clinical academic training fellowships including an HRB Research Training Fellowship, which is jointly supervised across the School of Clinical Therapies and of growing experience in research student supervision and PhD examination within OSOT. However, doctoral student supervision capacity is limited by the number of staff with a PhD.

The Occupational Science expertise and positive undergraduate experiences attract research students. The Panel spoke to postgraduate students who were complimentary about the training and support they receive in the School and from the University. Peer support is facilitated by a dedicated shared office space for research students.

The postgraduate research education of the Department has been demonstrated to be of a good standard.

**RAI 6 – Research income**

Two major awards totalling €536,528 were secured by the Department in the review period. These included the above-mentioned HRB Research Training Fellowship for Healthcare Professionals awarded to a PhD student (€256,528) and EU funding €280,000. Awards for three medium sized project grants totalled €93,000 and several smaller awards for student scholarships, research training and infrastructure grants were awarded to staff members totalling €11,000.

The total equates to approximately €17,000 per year across the review period for the six research active staff members. However, not all staff have generated income in the review period and as most are early career researchers, this is quite impressive. There was also evidence of new income since the review period.

Additional funding amounting to €298,500 was awarded to the Professor Emeritus but was not UCC income and therefore excluded. The research income activity of the Department has been demonstrated to be of a good standard.

**Areas of good practice**

The Panel was impressed by the progress the Department has made since the last review. It has made significant strides towards achieving the strategic objectives for Clinical Therapies, in particular those in relation to research capacity development both in University academics and the allied health professions more generally. There has been a trebling of postgraduate research student numbers and in the number of staff holding a PhD.
The Panel found evidence of a growing research culture and growing capacity for grant capture with good evidence of international collaboration in both grants and publications.

There have been a number of new developments, including courses (such as the MRes and DOccT) and clinical engagement and specialist training activities which have led to a significant increase in the numbers of postgraduate research students and created capacity for impact.

There is evidence of dedicated and effective leadership with a strategic focus on research capacity development in OSOT staff and support for early career researchers. Staff and students feel well supported and are highly motivated and very positive about their learning and teaching experiences. The teaching is to an excellent standard.

The individually tailored mentoring and support provided by the Head for early career researchers in OSOT is particularly commended.

There is evidence of a real commitment to research and clinical partnership, the delivery of specialist training, and effective community engagement. Excellence in teaching is recognised and rewarded.

OSOT staff network well with clinical staff and are well placed within UCC to benefit from pump priming and strategic development funds.

International collaboration is evident and benefits from existing established relationships with overseas colleagues and new developments.

There are some innovative research areas e.g. Lifestyle Redesign, which require further development and evaluation.

There is evidence of significant progress since the last research quality review, all full-time staff are research active. Early career researchers have demonstrated capacity development in the ability to generate research income and have been productive.

**Recommendations for future development**

Occupational Science and Occupational Therapy is a very small group of predominantly early career researchers. Research activity is reflected across a range of occupational therapy topics, which fit the broader theme ‘wellbeing across the lifespan’. However, there are also clear areas of methodological expertise e.g. qualitative research and themes around ‘ageing’ and ‘children’.

OSOT may wish to consider strategic alignment with College themes and how it could proactively lend its expertise both topic-specific (e.g. rehabilitation, ageing, children) and methodological to these themes to promote new collaborations and secure large grants. The contribution to research activity is not evenly distributed across the academic team. OSOT might consider ways non-research active staff can contribute.

OSOT has strong clinical links and a commitment to delivering specialist training for clinicians and engaging third sector and community stakeholders. These networking activities create opportunities for patient and public involvement (PPI) and strengthen pathways to impact. However, they are time-consuming, need to be balanced with efforts to secure further grant income and their potential impact needs to be quantified.

There is some evidence of recent large grant income and a number of smaller awards. Staff might consider positioning themselves for success by seeking representation on funding Panels.

Given the proportion of early career researchers it might be helpful to consider additional mechanisms for supporting further research capacity development and bidding activity e.g. leadership training, mentoring schemes, administrative and project management support and support for grant writing and governance. Early career researchers should explore opportunities to ‘buy out’ time for research and increase their capacity for research student supervision e.g. applying for postdoctoral fellowships. The Health Research Board (HRB) confirmed that it funds post-doctoral and more senior fellowships and is currently finalising its new strategic plan 2016-2020. The Panel strongly recommends that OSOT consider this route to research capacity-building.

OSOT should consider exploiting opportunities for more externally funded and match funded PhDs and creating mechanisms of support for existing staff and research students. For example formal peer support groups, protocol planning meetings, journal clubs, and statistical support clinics.

OSOT should consider ways existing HSE clinics within the School might contribute to research activity.

Now that more staff are trained to doctoral level there needs to be a concerted effort to improve the quality of outputs, preferably resulting from big grants.

Staff reported problems with research administration that had resulted in the loss of grant funding. OSOT should engage proactively with the University’s research support office to ensure timely administration of funding and explore further opportunities for support.

OSOT has great potential to influence the impact for Ireland agenda. However, staff may require impact training to realise their potential.

**Concluding statement**

The Panel has been impressed by OSOT’s overall research performance and rated it as good.

The OSOT Head has only been in post for three years. During that period, the unit has carried several long-term staff sicknesses and a heavy teaching load. Despite this resource limitation and the high proportion of early career research staff, OSOT has demonstrated considerable achievement towards the strategic research objectives for clinical therapies in the review period, trebling research students and the number of staff holding PhDs.

The achievements to date have depended heavily on the Head of OSOT personally supporting the research career development for each academic staff member, including grant writing, mentoring and back fill for teaching. This is not sustainable in the longer term. The University should consider and support more sustainable levels of staffing to ensure that research active staff can remain active, continue to develop, and support growing the numbers of doctoral students.
The OSOT Department has many positive attributes. There is evidence of a commitment to research and dedicated and effective research leadership. There is an established undergraduate occupational therapy programme underpinned by research and opportunities to attract postgraduate research students through existing research-related activities. Close working relationships between OSOT and SHS staff strengthen the capacity to attract fellowships and jointly supervise doctoral students. However, OSOT academic staff numbers are small and there is considerable commitment to teaching. Investment is needed to further enhance the research capacity of research active staff members.

Having combined the six Research Activity Indicators the Panel has rated OSOT as ‘good’. This indicates an improvement since the previous Research Quality Review (2009). As OSOT and SHS were rated separately in the current review, it is difficult to make direct comparisons of the specific metrics for publications but improvements appear to be across several if not all indicators.

The research activity of the unit demonstrates significance to the discipline and rigour to a good standard.

Overall comments

Panel C is comprised of six units. All six were rated individually although slight differences in how they are configured are described below. As only single integer scores were allowed this time, caution is advised when comparing performance of three units (School of Dentistry, OHSRC, School of Pharmacy) to the 2009 Review. Two units have clearly improved (OTOS, SHS) and the others have at least maintained their scores although SONM is at the low end of ‘good’ and SOP is at the upper end of ‘very good’. The Panel was impressed with this overall rising profile especially given the effects of national austerity measures and congratulates the units for their achievements.

The Schools of Nursing and Midwifery and Pharmacy are standalone units and achieved an Overall Research Evaluation (ORE) rating of ‘good’ and ‘very good’ respectively. This compares to ratings of ‘good’ and ‘good to very good’ in the 2009 Review, suggesting Nursing and Midwifery has maintained its ‘good’ (albeit a borderline score at the low end) and Pharmacy achieved a strong ‘very good’ (bordering on excellent).

The School of Dentistry and the Oral Health Sciences Research Centre were rated individually this time as ‘good’ and ‘very good’ respectively. Compared to the 2009 Review, this suggests that the School of Dentistry is now a definite ‘good’ and OHSRC a definite ‘very good’. Many of the OHSRC staff contributed to the Dentistry score.

Occupational Science and Occupational Therapy and Speech and Hearing Sciences were rated individually this time and both achieved a rating of ‘good’. When combined, the ORE for the School of Clinical Therapies is also ‘good’, which represents an improvement from ‘fair’ to ‘good’ since the 2009 Review when the School of Clinical Therapies was rated as ‘fair’.

Overall comments and conclusions at Panel level

Across all six disciplines, the Panel was impressed by the quality of overall research activity, which ranged from good to very good. Additionally, at least two units had improved since the 2009 Review. This was especially noted given the following two contextual factors:

1. National austerity measures, the resulting financial constraints faced by the University and the evident reduction, or at best stagnation, of staffing levels in the units over the period under review.

2. Maintaining a high standard in teaching across the units (e.g. several members of OSOT have been awarded UCC President’s Award for Excellence in Teaching) including several newly developed programmes, some of which are unique to UCC across Ireland (e.g. MSc Audiology in SHS) and across the British Isles (e.g. MPharm in SOP).

The Panel also noted different strengths between units, where some (e.g. OHSRC and SOP) excelled at RAI 6 (income) and others (e.g. Nursing and Midwifery and
SOP) were strongest in RAI 5 (PGR). This appropriately reflected the differing starting positions where some disciplines have a tradition of entry level doctorally trained lecturers (e.g. Pharmacy) and others have to invest time growing their own (e.g. Nursing and Midwifery, Clinical Therapies). The Panel felt confident that these were wise capacity-building investments by the units that will benefit the institution in the near future.

Postgraduate research is very strong within these units. It is provided flexibly through a variety of routes resulting in an interestingly mix of PGT and PGR students who spoke positively of their experience e.g. opportunities for developing your existing staff but also for attracting more traditional full-time PhD students.

Dentistry was particularly weak in PGR (‘fair’) but strong (‘very good’) on income and RAI 4 (Research-related activities). PGR was also OHSRC’s weakest area (‘good’), whereas it scored above this level in all five other indicators. With the one exception for OHSRC, publications (RAIs 1 and 2) were the weakest areas for the other five units and are key areas to target. It is interesting to note that research income is at least at the level of ‘good’ across all six units with some substantial recent grants hopefully leading to international leading future publications.

The Panel commends the units and the University for managing to recruit and retain a committed, highly-motivated workforce with some examples of great leadership within these disciplines (e.g. Nursing and Midwifery and Clinical Therapies). Your dedicated workforce and some inspirational and generous leaders have created a research environment rated very highly by the Panel (RAI 4). All six units achieved at least a ‘very good’ level in RAI 4. This should stand you in good stead when opportunities come for attracting new talent and indeed retaining those on temporary contracts.

Recommendations to the University

First, the Panel commended the institution’s vision in commissioning this review, and in the efforts made by all staff to provide us with sufficient information for us to have confidence that the results are based on a fair and thorough evaluation. We felt welcomed, enabled and enthused to perform our role.

We appreciated having the discretion to balance the objective metrics and their weightings against discipline-specific benchmarks and to use our judgement to raise an ORE, where the weighting towards publications did not accurately reflect the high quality of other research indicators given the starting point of certain disciplines. The Panel was disappointed by the move towards single integer scores for the ORE which limited comparability with the 2009 review scores.

In addition to the six sets of unit level recommendations provided above, the Panel wish to add some overarching University level recommendations:

• The Panel is greatly concerned about sustainability, particularly around future leadership in some of the smaller units. Over-dependence on single inspirational leaders is a high risk strategy and the Panel recommends proactive succession planning. The University should consider how to develop the next generation of leaders and remove the relatively flat structure that exists in several disciplines. The University should draw on examples of best practice in leadership e.g. Pharmacy and senior teams in Nursing and Clinical Therapies.

• The Panel recommends capacity-building across the units. The University should engage with units to build business cases for recruiting and retaining the best staff. The Panel was aware of current funding successes for PhDs and impressive progress with growth in the levels of doctorally trained staff too. The University should support units to prepare postdoctoral and higher level funding bids especially in view of the HRB’s imminent new strategic plan 2016-2020. Strategically the University should lobby for improved postdoctoral career pathways and more postdoctoral funding opportunities.

• With the aim of increasing the number of publications rated as excellent, the University should consult with departments to identify their research support needs, to agree priorities and to encourage a two-way flow of information such that departments promote themselves more to increase their visibility to college and align themselves to the College and University research themes.

• Across this Panel we saw great potential to develop the impact agenda and enhance the University’s reputation. The University needs to raise awareness of Impact for Ireland (some departments seemed unaware of it). The Panel recommends the University provides introductory level training around the meaning, means and value of impact, creates impact champions and a University impact lead.
Section B: Outline of RQR 2015 Process

The following information outlining the structure of the review process is abridged from the RQR Guidelines 2014.

Review Structure

1. Fifteen Peer Review Panels will be appointed, based on disciplinary clusters. Peer review teams may vary in size according to the size and complexity of the cluster of academic units and disciplines within the cluster.

2. Peer Review Panels will receive material in advance. The majority of reviewers will work remotely. Chairs will visit the University twice: before the exercise for briefing and to ensure consistency of approach and, together with the disciplinary vice chairs, after the remote review of submissions has taken place.

3. Site visits to include:
   - First site visit (by Chairs)
     - Information and briefing meetings between Panel Chairs and members of the Steering Committee.
     - Briefings with Colleges and RICUs on prevailing research and graduate education conditions.
   - Second site visit (by Chairs and Disciplinary Vice Chairs)
     - Presentation from academic units on research activity.
     - Meetings with staff, researchers and postgraduate research students.
     - Meetings with relevant Officers of the University.
     - Visit to facilities of units.
     - Consideration of the reports of the remote reviewers.
     - Agreement on results.
     - Drafting of report according to guidelines and criteria for assessment.

Criteria for Assessment

Research performance will be evaluated, relative to international disciplinary norms, under the following headings:

a. Selected published output
b. Total published output
c. Peer esteem
d. Research-related activities
e. Postgraduate research environment
f. Research income

definitions

For the purposes of the review the following definitions apply:

1. Assessment Period: the period from 1 January 2008 to 31 December 2014. The research described in submissions from academic units and research centres/ institutes, including data about research funding and the textual commentary, must relate to this period.

2. Census Date: the date determining the affiliation of academic and research staff to a particular academic unit/research centre/institute. All staff should be submitted by the academic unit/research centre/institute that employs them on this date, regardless of previous or forthcoming changes in their employment status. Note that staff can be associated with an academic unit and a RICU, but will only submit and be reviewed once and the outputs incorporated into the academic unit and the RICU. A staff census will be undertaken during the present academic year on 31 May 2014 to enable planning. An update to the census will be undertaken on 31 October 2014, to account for all staff hired after May 2014 and who will be in post at the time of the review, to provide the final list for the review.

3. Publication Period: the period during which research outputs must be placed in the public domain (or in the case of confidential outputs, lodged with the sponsor) if they are to qualify for inclusion in the assessment. The publication period runs from 1 January 2008 to 31 December 2014.

4. Research: this definition was approved at the Academic Council meeting of 7 March 2008 and remains unchanged:

‘Research’ for the purpose of the review is to be understood as original investigation undertaken in order to gain knowledge and understanding. It includes work of direct relevance to the needs of commerce, industry, and to the public and voluntary sectors; scholarship*; the invention and generation of ideas, images, performances, artefacts including design, where these lead to new or substantially improved insights; and the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction. It excludes routine testing and routine analysis of materials, components and processes such as for the maintenance of national standards, as distinct from the development of new analytical techniques. It also excludes the development of teaching materials that do not embody original research.

*Scholarship is defined as the creation, development and maintenance of the intellectual infrastructure of subjects and disciplines, in forms such as dictionaries, scholarly editions, catalogues and contributions to major research databases.

5. Consultancy: income and research outputs arising from consultancy contracts should normally be excluded, since consultancy is usually concerned with applying existing knowledge. However, they may be included if the work undertaken or published as a result meets the definition of research, irrespective of the nature of the contract or invoicing arrangement.

6. Pedagogical Research: is included in the scope of the RQR and includes research which enhances the theoretical and/or conceptual understanding of:
   - teaching and learning processes in higher education
   - teacher and learner experiences in higher education
   - the environment or contexts in which teaching and learning in higher education take place
   - teaching and learning outcomes in higher education
   - the relationships between these processes, outcomes and contexts

7. Applied and Practice-Based Research: is included in the scope of the RQR and involves a process of systematic investigation within a specific context in order to solve an identified problem in that context. It aims to create...
new or improved systems (of thought or production), products, processes, materials, devices, or services which have an impact on society through enhanced wealth-creation and quality of life.

Some characteristics of applied research and practice-based research are that:

a) They are informed by an intellectual infrastructure of scholarly research in the field.
b) They apply and/or transfer enhanced knowledge, methods, tools and resources from pure research and developmental research.
c) They contribute to scholarship in the field through systematic dissemination of the results.
d) The outcomes may be specific to the situation in which the research has been applied, although the methods/tools evolved are often transferable.

8. Creative Research: encompasses creative work and its outcomes in a range of subject areas, including creative writing, music, drama, dance, theatre, performance, live art, and film. This research may lead to published materials in a variety of forms in any of these subject areas. Such research is also diverse in the range of artistic practices on which it may draw and may extend to any cultural, geographical and historical context. It may include production or performance of creative material which itself results from a process of original creative enquiry. This work may also be collaborative in nature.

9. Research Submission: this is the totality of what will be submitted to review Panels and incorporates contextual information (the research description for each unit which sets out the extent and boundaries of the research carried out in that area), the research statement (see below) and the information required by the six Research Activity Indicators (see below).

10. Research Statement: the research statement will provide contextual information and an overview of the research activity in each unit of assessment during the review period in addition to a critical assessment of progress made since the last RQR, including a response to any recommendations made. A template and further information on submission will be provided. It will be a maximum of 5,000 words (see below for further detail).

11. Research Activity Indicators (RAIs): there are six research activity indicators. The information provided under each of the six headings, together with the research statement and the research description, constitutes the research submission.

12. Unit of Assessment: these are the units reviewed by each Panel as defined in Appendix A. It includes each of the academic units and each of the associated Research Institutes, Centres or units. NB: Not all of the associated Research Institutes, Centres or units will be reviewed separately.

Assessment Process

1. This is an expert peer review exercise. Panel members will exercise their knowledge, judgement and expertise to reach a collective view on the quality profile of research described in each submission, that is, the proportion of work in each submission that is judged to reach each of five quality levels (see below). The definition of each level relies on a conception of quality (of leading international standard) which is the absolute standard of quality in each unit of assessment. Each submission will be assessed against absolute standards and will not be ranked against other submissions.

2. External experts nominated by the academic units will be asked to suggest who, from among their list of Panel nominations, might be suitable for the role of Chair. The final decision and approval of chairs will be made by the Steering Committee.

3. Up to five Disciplinary Vice-Chairs will be appointed, with the assistance of the Chair, for each Panel. They will be responsible for the co-ordination of the electronic evaluation of each disciplinary unit by the remote reviewers. They will attend the site visit post-evaluation.

4. Chairs and Disciplinary Vice-Chairs will be responsible for ensuring consistency across and within Panels and the application of international standards in the exercise.

5. Panel reviewers will initially evaluate RAIs 1-3 and elements of RAI 4 at an individual level. They will subsequently review overall performance of the academic unit or RICU drawing on the input of each researcher, recognising that researchers may appear in more than one.

6. First Site Visit. Panel Chairs will visit UCC for one day for briefing purposes and to ensure that the Panels work consistently as far as possible.

7. Second Site Visit. Following the remote review of the submissions, the Chairs and Disciplinary Vice-Chairs of the Panels will visit UCC to conduct site visits. They will meet with staff and officers of the unit and University and will visit the research and other facilities of each unit under review in order to form an assessment of the research environment. At the second site visit, the Chairs and Disciplinary Vice-Chairs will consider the reports from the remote reviewers in order to initiate discussion on each individual submission. A preliminary profile of the quality of outputs will be considered. A profile of the quality of research outputs and peer esteem will be compiled, along with decisions made as to scores for the research-related activities, postgraduate training, the research funding and research environment, taking on board the deliberations of the Panel at large.

8. An overall research evaluation (ORE) will be awarded by the Panel to each unit. This will be achieved through a process of consideration of all scores in the six RAIs along with consideration by the Panel of the Research Statement and other contextual information. The results for the six RAIs will also be produced for each unit, providing anonymous percentiles for RAIs 1, 2 and 3, along with results for the unit in RAIs 4, 5 and 6. The Panel will finally confirm that, in its expert judgement, the overall recommended score is an accurate and appropriate reflection of the research activity in each submission, and that its assessment has taken account of all components of the submission. Further guidance will be provided to Chairs of Panels at the first site visit.

9. Descriptive and evaluative statements. Panels will provide a descriptive statement of their view of the overall quality of research activity for each academic unit. Panels are also asked, within this statement, to comment on the totality of research activity and performance in the context of the research environment in which the unit is working and to make recommendations for improvement.
**Research Excellence**

Panels recognise the diverse range of disciplines represented by the units of assessment assigned to them. Set out below are the broad parameters for the assessment of the quality of research for each of the six Research Activity Indicators within which individual Panels may exercise a degree of variation. The quality levels refer to quality standards of scholarship that are normed within the international academic community.

**Level 5** Quality that is of leading international standard.
- The research work or activity will be excellent, displaying a very high level of originality, significance to the discipline and rigour; it will be innovative and potentially agenda-setting in research and/or policy fields.

**Level 4** Quality that is of very good standard in terms of originality, significance and rigour comparable with such work internationally.
- The research work or activity has had or is likely to have a significant impact on research and/or policy agendas.

**Level 3** Quality that demonstrates significance to the discipline and rigour to a good standard.
- The research work has had or is likely to have a recognised impact on research and/or policy agendas.

**Level 2** Quality that demonstrates significance to the discipline and rigour to a fair standard.
- The research work or activity has only had or is likely to have a marginal impact upon existing paradigms and agendas within the discipline.

**Level 1** Quality that falls below the adequate standard of recognised work within the discipline.
- The research work or activity is poor and has had no impact nor is it likely to have an impact upon existing paradigms and agendas within the discipline.

Because of the differences which exist between the six RAI s, appropriate criteria will be employed in each one:

- **RAI 1** will be evaluated against the criteria of originality, significance and rigour.
- **RAI 2 and 3** will be evaluated against the criteria of extent, diversity and quality.
- **RAI 4 and 5** will be evaluated against the criteria of international disciplinary norms.
- **RAI 6** will be evaluated against the criteria of funding levels for the specific unit and cognate disciplines available to researchers in Ireland.

**Definitions of Research Activity Indicators (RAI)**

**Research Activity Indicator 1 (RAI 1): Selected Published Output**

Panels will be required to rate each of the five selected research outputs for each Category A and B researcher. Each publication will be rated by two Reviewers. The overall quality profile will be finalised by the Panel.

**Research Activity Indicator 2 (RAI 2): Total Published Output**

Two Panel members will be required to allocate an individual Category A or Category B researcher’s total research output in the period, identified on IRIS/CORA to one of five quality categories.

**Research Activity Indicator 3 (RAI 3): Peer Esteem**

The purpose of this metric is to capture the overall scholarly standing of Category A and Category B researchers within the unit, based on information presented in their IRIS profile. Evidence of peer esteem, across the career as a whole, includes publication output, Fellowships, Honours, Invited Plenary Presentations at significant disciplinary conferences, service on appointment Panels at other institutions, external examining, translation of works, refereeing/editing of journals etc., as well as significant research activity which occurred before the review period began (e.g. widely cited publications, international prizes awarded, etc.). The rating given to an individual should reflect the level of the individual’s achievements across his or her research career as a whole. The Panel will determine the quality profile for each individual researcher. The overall quality profile will be finalised by the Panel.

**Research Activity Indicator 4 (RAI 4): Research-related Activities**

For the purposes of the RQR ‘research-related activity’ is intended to capture activity within and beyond the unit by individual or groups of researchers in the unit. This includes seminar series, research-focused public engagement exercises, specialist training provision, collaboration, research mentoring, outreach activities, support for scholarly institutions, evidence of research-led teaching at all levels, etc. The evidence for this will be collated from individual’s IRIS profiles, and the contextual information supplied by the unit.

Each member of the Panel is asked to give a single quality level for the collective research-related activities of the unit based on their professional judgement.

The modal (most frequently occurring) rating across reviewers will be taken as the research-related activity score. [The higher rating will be preferred where the distribution of ratings is multimodal.]

**Research Activity Indicator 5 (RAI 5): Postgraduate Research Education**

Panels are asked to give a single quality level for the collective activities related to postgraduate training. This rating should reflect the professional judgement of the peer reviewers concerning the quality level descriptors provided, taking into account the number of students studying for research degrees, culture of support (i.e. arrangements for supervision), and research training environment and opportunities available for research students within the unit under review. The evidence considered will include a statement on postgraduate research submitted by the unit, information from published unit web-pages, numerical data from university offices regarding completion rates, completion times, etc. and process used by the unit to ensure that these are satisfactory.

Each member of the Panel is asked to give a single quality level for the collective research-related activities of the unit based on their professional judgement. The modal (most frequently occurring) rating across reviewers will be taken as the research-related activity score. [The higher rating will be preferred where the distribution of ratings is multimodal.]

**Research Activity Indicator 6 (RAI 6): Research Income**

Each member of the Panel is asked to give a single quality level for the collective research-related income of the unit based on their professional judgement of the research area, taking into account the Research Landscape.
relevant to researchers in Ireland as described in the briefing documents provided. The modal (most frequently occurring) rating across reviewers will be taken as the research-related activity score. [The higher rating will be preferred where the distribution of ratings is multimodal.]

List of Panels & Units

Panel A
School of Medicine, incorporating:
• Department of Medicine (inc Radiology)
• Department of Surgery (inc Anaesthesia)
• Department of Pathology (inc Med Microbiology)
• Department of Psychiatry
• Medical Education Unit

Panel B
School of Medicine, incorporating:
• Centre for Gerontology & Rehabilitation
• Department of Epidemiology & Public Health
• Department of General Practice
• Department of Paediatrics & Child Health
• Department of Obstetrics & Gynaecology
Irish Centre for Foetal and Neonatal Translational Research (INFANT)

Panel C
School of Clinical Therapies, incorporating:
• Department of Occupational Science & Occupational Therapy
• Department of Speech & Hearing Sciences
University Dental School & Hospital
School of Nursing & Midwifery
School of Pharmacy
Oral Health Services Research Centre (OHSRC)

Panel D
School of Medicine, incorporating:
• Department of Anatomy & Neuroscience
• Department of Pharmacology & Therapeutics
• Department of Physiology
School of Food & Nutritional Sciences
Department of Microbiology
Department of Biochemistry

Panel E
Department of Chemistry
School of Biological, Earth and Environmental Sciences (BEES), incorporating:
• Geology
• Plant Science
• Zoology & Ecology
Environmental Research Institute (ERI)
Analytical & Biological Chemistry Research Facility (ABCRF)

Panel F
School of Computer Science & Information Technology
School of Mathematical Sciences, incorporating:
• Mathematics
• Applied Mathematics
• Statistics

Panel G
School of Engineering, incorporating:
• Department of Civil & Environmental Engineering
• Department of Electrical & Electronic Engineering
• Department of Process & Chemical Engineering
Department of Physics
Tyndall National Institute

Panel H
School of Geography & Archaeology: the Human Environment, incorporating:
• Department of Geography
• Department of Archaeology
Cork Centre for Architectural Education

Panel I
Department of Accounting Finance & Information Systems (BIS)
Department of Accounting Finance & Information Systems (AF)
Department of Food Business & Development
Department of Management & Marketing
School of Economics
Centre for Policy Studies

Panel J
Department of Government
School of Law
School of Sociology & Philosophy, incorporating:
• Department of Sociology
• Department of Philosophy
Study of Religions
School of Applied Social Studies
Institute for Social Science in the 21st Century (ISS21)

Panel K
School of Applied Psychology
School of Education

Panel L
School of Irish Learning, incorporating:
• Department of Modern Irish
• Department of Early & Medieval Irish
• Béaloideas/Folklore & Ethnology

Panel M
School of Languages, Literatures and Culture, incorporating:
• Department of French
• Department of German
• Department of Spanish, Portuguese & Latin American Studies
• Department of Italian
Asian Studies

Panel N
School of History, incorporating:
• Department of History
• History of Art
Department of Classics
School of English

Panel O
School of Music & Theatre, incorporating:
• Department of Music
• Drama & Theatre Studies