



**Trinity College Dublin**  
Coláiste na Tríonóide, Baile Átha Cliath  
The University of Dublin

**Report to Council on the  
Review of Dental Science**

**21 – 23 February 2017**

**External Reviewers:**

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## **Terms of Reference for the Quality Review of the School of Dental Science.**

**Context:** Academic activities in education and research at Trinity College Dublin, the University of Dublin are performed in one of three Faculties:

- (i) Arts, Humanities & Social Sciences which comprises 12 Schools;
- (ii) Engineering, Mathematics & Science which comprises eight Schools; and
- (iii) Health Sciences which comprises four Schools.

Each School is led by a Head of School who is responsible for the effective general management of the School, for ensuring the provision of academic leadership and strategic vision, and for the quality of the student experience.

### **Purpose of a School Review is:**

- (i) to provide a structured opportunity for a School to critically reflect on its activities and plans for development in the context of the school and college strategic plans and other strategic initiatives;
- (ii) to benefit from a constructive commentary by external reviewers to College that are experts in their field at a senior academic level;
- (iii) to ensure that quality and standards in teaching, research and administration are being maintained and enhanced, and that any areas of concern are identified and addressed;
- (iv) to promote the enhancement of the School's provision as part of a strategy for continuous quality improvement.

### **Outcomes of a School Review:**

The Review Team will be asked to submit a strategic report to the University in which they are asked to provide an overall assessment of:

1. The Dental School Strategy in terms of its fitness-for-purpose to respond to the College strategies, the internal and external environment, emergent risks and opportunities nationally and internationally.
2. The quality assurance of the teaching and learning provision, learning resources and the learning environment (internal and external to campus) in:
  - a. undergraduate programmes and curriculum that prepare graduates with the graduate attributes necessary for professional practice;
  - b. postgraduate taught programmes, curriculum and graduate attributes that continuously develop professionals who wish to specialise in areas of dental practice, public health and scientific endeavour;
  - c. postgraduate research programmes and postdoctoral development that prepare future researchers to build on the School's core research strengths and innovate for impact.
3. The quality assurance of the School's research programme, participation in College Research Themes and engagement with Trinity Research institutes.
4. Resources (Human, Financial) available to the School to deliver on its academic mission.
5. The effectiveness of the School's governance, management and administrative structures in delivering and supporting the achievement of its strategy and mission.

# 1. Reviewers' Report

## 1. Introduction/Executive summary

The review team wishes to acknowledge the excellent support provided by the Trinity QA administration in facilitating our roles both prior to and during the process. The Dental School and Dental Hospital staff and students were open frank and engaged at all levels with the inspection and review process. As a result we are confident the report reflects a true and informed assessment of the School.

- We recognized the external environment and fiscal pressures, which the School has managed well over the last decade.
- We found no areas of concern relating to the school which might warrant urgent intervention or action and recognize the strong leadership of the Head of School and his Executive Group, supported by an excellent administrative team.
- Observations were triangulated taking into consideration documentation, observations and meetings with external stakeholders, staff and students.
- The recommendations which we make will rather be to offer suggestions for enhancement which will stabilize the School against future external pressures, set goals to inform future strategy and improve the well-being of staff and students.
- The range and diversity of the courses offered represent a major challenge for a Dental School which is small in comparison to other peer group units.
- The workload pressure and conflicting priorities that exist for staff, along with the absence of a formal workload model, were noted. These coupled with an apparent lack of access to a formal academic promotions process are a significant future risk to stability of the Dental School.
- The clinical and learning and teaching facilities are excellent. There is a well-established research environment supporting Microbiology. If the Dental School is to meet the Research Strategy aspiration then closer collaborations with the Trinity Research Institutes and assured access to appropriate shared research facilities will be required within all theme areas.
- The Dental School is aware of the need to focus research activity to achieve international leading edge research output. A mechanism to direct all student and staff projects to the agreed research themes along with a peer review process to assure quality and high success rates for grant applications is required.

## **2. Findings**

### **1. Dental School Strategy**

The School has a well-developed strategic plan. The aspirations are wholly appropriate for an academic School of Dental Science and we observed commendable progress against plans set out in the 2015-2019 School plans. The wider strategy of Trinity is reflected well in the School of Dental Sciences document.

In the future the School will need to be cognisant of the Department of Health Oral Health Strategy and the implications for future workforce requirements. Similarly, the proposed revisions by the Dental Council of Ireland to the Dental Act may provide enhanced opportunity in the development of the Allied Professions and an increase in demand for PGT courses which also meet the requirements for specialist registration.

The School has made a commitment to interprofessional teaching and learning. Both within the School and across the wider Health Care Professions programmes in Trinity, opportunity exists to further enhance interprofessional teaching and learning. The work stream should deliver not only enhanced student experience but also reduction in academic workload by assuring the most efficient use of staff time.

The research strategy for the School of Dental Sciences shows a well-considered progressive pathway to directed and focused translational areas of research. Given the finite resource and limited funding pool available, along with what may be less than a critical mass in some disciplines, we have some concern that current research aspirations over four theme areas may exceed the School's capacity.

We note that a number of the reviewers' recommendations fall outside the direct control of the School of Dental Sciences in Trinity.

### **2. Undergraduate programmes**

#### **• Bachelor of Dental Science Programme**

##### **a. Quality assurance**

We found good evidence of formal QA processes with supporting documentation, assuring compliance. There is good practice with the engagement of students within the formal course management committee. Variations exist in the mechanisms of feedback across the Dental Science and Allied Professionals undergraduate courses. There may be benefit in the establishment of a regular staff student forum in which the student body as a whole can not only voice concerns but also make positive suggestions to enhance interprofessional learning and engagement.

##### **b. Curriculum**

All of the curricula at undergraduate level meet the requirements for regulatory bodies and encourage the attainment of Trinity key qualities for graduates. There was a fundamental difference in the design principle for the Dental Sciences curriculum compared to the essentially didactic Allied Professionals courses. The Dental Sciences course design comprises problem based learning (PBL) as part of a blended learning offering which was not present in the Allied Professionals programmes.

There was good evidence of multiple courses sharing access to existing learning opportunities across the undergraduate programmes. Enhancement could be gleaned by specific design of modules which take into account the requirement to encourage inter-professional learning. This concept should inform future curriculum review.

The curriculum is comprehensive but congested, a feature that has been recognized by the staff and which was independently reported by the students. The valuable mapping of the existing curriculum against the Intended Learning Outcomes (ILOs) from the Dental Council of Ireland and other relevant regulatory and professional bodies will now provide a basis for curriculum review, which is the next critical stage of the process that must be undertaken in a comprehensive and strategic manner. There is definite opportunity to decongest the curriculum in Dental Sciences. Applied clinical science should lend itself to delivery in the PBL model hence facilitating removal of any need for basic science modules. There is pressure for modernisation of curriculum content e.g. CAD-CAM technology which can only be managed if space is secured through removal of redundant elements of the curriculum.

The Grad-link programme is providing valuable mentorship for undergraduate students through the facilitation of links with general dental practitioners. This process is highly commended.

### **c. Teaching and learning provision**

The school clearly has a highly committed team of teachers both within DDUH and externally. The practice of teachers delivering external placements also having clinical sessions within the Dental Hospital is an excellent feature which enhances the consistency of the teaching. Use of established problem based learning encourages lifelong learning. We heard from external stakeholders that students exhibited significant transferable skills with respect to critical appraisal and communication, setting them up well for a professional commitment to life-long self-directed continuing education. This reflects very well on the College-wide strategy for graduate attributes (“think independently; communicate effectively; develop continuously; act responsibly”).

The blended teaching approach leads to potential for duplication that in a congested curriculum should be addressed (only in year 1-4). This should be given careful consideration during the curriculum review process that will follow the completion of the ILO mapping exercise.

The introduction of reflective portfolios for students is commended. The School has already established competency based assessment criteria for clinical cases in keeping with international recognized best practice.

### **d. Learning resources**

The teaching and clinical resources are superb and the annual capital investment for refurbishment and technology enhancement is laudable. Particular features included the large number of small group rooms and their management (in the hands of students themselves), co-location of the library and the library as a resource. We heard from both staff and students that the librarian is highly supportive and positively engaged with students from all programmes. The IT facility for off-site access to library resources is very useful to staff and students. Students and staff had an input into the selection of journals.

The equipment and practices in the pre-clinical skills teaching facility mirrored directly the clinical environment within the hospital, greatly facilitating the transition for students from simulation to real-life clinical practice. There is dedicated space for the teaching of instrument decontamination and sterilization and this demonstrated the School’s response to the inspection report from the Visitation of the Dental Council of Ireland in March 2012.

The use of the electronic clinical management system Salud introduces students to electronic health records and permits booking and scheduling for patients. Use of additional modules and features providing added functionality to the Salud system might be beneficial (see research below).

We commend the introduction of an e-Portfolio and encourage the School to look at how this will enhance future initiatives after the mapping exercise. Such a portfolio may also have the potential to reduce assessment load and duplication.

There is clear evidence of access to a wide range of clinical cases both within the hospital and externally, providing an excellent resource for the clinical students at all stages of their programmes. This is a challenge in many UK dental schools.

Early adoption of CAD-CAM technology lays a foundation for future expansion. The Dental Production Laboratory gave good support to Dental Science Student clinical education.

**e. Student welfare**

There is international evidence of increasing levels of stress among health care professionals and Dublin Dental School is subject to the same pressures. Students receive formal information on the tutor service as part of their 1st year orientation and personal tutors make initial contact with their tutees. However, we feel that the duty of care by the College could be enhanced by considering a more closely monitored and compulsory tutor-initiated contact process. We also recommend consideration of a more formalized staff student liaison structure that will enable feedback to be made by the wider student community to the School regarding the potential effects of curriculum change and other aspects of the academic and clinical environment relating to student welfare.

**f. Learning environment (internal and external to campus).**

Co-location of the hospital within Trinity College and close to St James's Hospital and other major hospitals enhances the student experience. Access to Trinity Hall residence is advantageous for first year students.

The Dental School provides valuable support and service to the local community. The provision of clinical facilities is of a high standard. The allocation of a capital refurbishment fund by the Dental Hospital Board assures continued access to modern safe dental equipment. The Clinical Skills laboratory within the Dental School is equipped to match that in the clinical environment and thus provides a seamless transition from laboratory to clinic.

The Salud patient management system has been embedded well into clinical practice. Students gain valuable experience of managing their own clinical schedules. The system serves the dual requirement for the School to monitor student progress.

There was access for students of all programmes to a wide range of clinical cases appropriate to learning needs.

- **Allied Professions Programmes**

**a. Quality assurance**

We were assured that despite the variations in course design there was consistency of quality assurance process across all programmes. There was evidence that students gained valuable experience in outreach clinical placements. We heard from staff from those locations about the quality of their experiences and the consistency of their assessments. We note that the School has responded to National Healthcare Workforce requests to establish new Allied Professionals Programmes and achieved high quality offerings despite the lack of startup or support funding. We would recommend that no further Allied Professions Programmes be established without due consideration to the staffing profile in the Dental School and Hospital.

## **b. Curriculum**

We were assured that the curricula meet current requirements for safe clinical care. There was evidence of shared access to learning opportunity; we did not see evidence of specific curriculum design to meet inter-professional learning expectations. The students in each of the areas that we met appeared satisfied with the course provision. It was acknowledged that student contact hours and workload were high in courses leading to professional registration. The current school committee structure does not appear to facilitate integration of curriculum design and the School may wish to address this. It was noted that staff from the Dental Sciences curriculum are also heavily engaged in the Allied Professions programme. The commitment is evidence of future potential to streamline provision designed to increase interprofessional learning.

The Dental Nurse Distance Learning programme (for practice based dental nurses unable to attend Trinity) which is delivered jointly with UCC provides a valuable resource to the country reaching out to students who might otherwise be excluded from learning opportunity. The course makes innovative use of IT based learning solutions.

## **c. Learning resources and environment**

The environment and facilities were entirely appropriate. There was evidence of equality of access to the School's facilities and the designated Dental Technology teaching laboratory was excellent.

## **3. Postgraduate taught programmes**

### **a. Quality assurance**

We note the challenge of recruiting suitable external examiners but support its importance for academic credibility and governance.

The School provides opportunities for postgraduate training concluding at specialist level; however, with the exception of the EU recognized specialties of Oral Surgery and Orthodontics, there is no formal registration mechanism through the Dental Council of Ireland. The assessors found this to be a perplexing situation and one with potential public safety implications. It is clearly beyond the scope of the School to influence the situation directly but the issue should be given serious consideration by the Dental Council of Ireland. There is a clear potential for graduates to seek overseas formal registration and employment (e.g. the UK General Dental Council).

In offering a suite of postgraduate courses, the School is supporting development and maintenance of an appropriately trained dental workforce to meet the requirements of service delivery to the country and beyond. We received feedback that graduate employment opportunities were very good, but in terms of future scoping of workforce requirements and student uptake, the School may consider tracking first employment destinations.

We suggest that the School consider review of orientation/induction arrangements for overseas students. The overseas taught postgraduate students may benefit from an opportunity to learn modern teaching skills and pedagogy, given the fact that on return to their home country, they may be required to undertake significant teaching duties.

The small research projects that comprise part of the postgraduate courses should be matched to the School's key research priorities.



There was good evidence of interaction with external bodies to ensure relevance of the postgraduate curricula (for example The Irish Specialist Training Assessment process, a requirement of the Irish Committee for Specialist Training in Dentistry (ICSTD)).

#### **b. Curriculum**

The curriculum seems entirely appropriate. In general, owing to clinical space and staffing capacity, the cohort size would appear to be very small relative to the administrative burden. There is a risk of disproportionate staff challenge to support these programmes. We recommend that opportunities for shared teaching and learning across the PGT programmes should be investigated. There could, for example, be an extensive core course accessed by all postgraduates with subject specific modules to smaller cohorts.

The proposed MSc in Dental Practice certainly addresses the need for dental practitioners to fulfill lifelong learning and the course structure permits flexible options for students. However, we are concerned that with the current commitments of staff there is a risk of overload and recommend that a cautious and considered approach should be taken. Cohort size and course financial planning should be set at a level which will ensure sufficient resource to permit recruitment of new additional dedicated staff.

#### **c. Graduate attributes**

Many of the senior leadership posts in the Dental Hospital and School are held by Trinity graduates, reflecting the clinical skills and graduate attributes which the School confers along with contribution to education and development of future professional leaders. There is evidence that undergraduates who obtain a first degree at Trinity are returning to undertake postgraduate studies in the Dental School thus reflecting the esteem in which students hold Trinity.

### **4. Postgraduate research programmes and postdoctoral development**

We confirmed that the School offers a range of relevant subjects and supervisors for PGR students. Some postgraduate students reported flexibility in the choice of research topics driven by personal interests. Whilst recognizing the need to preserve academic freedom, given the limited resources and risk of fragmentation of effort, the School may wish to establish a process encouraging all research projects to be aligned to the School's stated research strategy which is currently being rolled out.

There is a perceived lack of support, including career development, for postdoctoral fellows. We recommend that this group be given representation on the Research Committee.

Despite the support and encouragement for research in the School, recruitment of PGRs remains challenging. External international fiscal concerns along with a changing political horizon are clearly out with the School's influence. As a result international recruitment may be unpredictable. Nevertheless staff development in house to ensure succession planning will require a mechanism to attract current junior staff to PGR and post-doctoral research activity.

Succession planning and recruitment of staff to PGR courses are hampered by a lack of access for clinicians to an academic promotions pathway resulting from their employment by the hospital rather than Trinity. This is a significant disincentive for those who are research-active and a solution to remove this blockage should be a priority for senior staff in Trinity and the DDUH.

The spread of PhD supervision is generally well distributed but we note that one individual with clinical and teaching responsibilities has the second highest number of PhD students. We understand students will have at least two supervisors in the future but at present single supervisors are in the majority. We would recommend

that all staff who meet criteria for PGR supervision be allocated students in a formal manner under the guidance of the Director of Research. In this way less experienced supervisors can be supported through pairing with experienced colleagues.

## 5. **Research**

### a. **Quality assurance**

There is evidence of some peer-reviewed publications in high quality international journals. We recognise the change in funding stream priority for healthcare research that has occurred and the risk this poses for Dentistry, particularly in fundamental biological sciences such as microbiology.

It would appear that the submission of grant applications is not subject to assurance of alignment to the research strategy or peer review. Our recommendation is that the School considers establishing a process for the Research Board to oversee all grant submissions and establish a peer review process to assure the best possible success rate. Certainly, at the very least, oversight of large scale grant applications would be desirable.

### b. **Participation in College Research Themes/Research Institutes**

There is evidence that the School has made initial attempts to map onto the College Research themes and is collaborating with relevant groups across the College. However, there is potential for further enhancement. We recognize that the Director of Research sits on the College wide Research Committee but for those Trinity Research institutes where there is developing collaboration, we would recommend mechanisms for increasing DDUH representation and direct lines of communication.

### c. **Research strategy**

We commend the School on its effort to focus its research strategy but would recommend that it continues to reflect on the scope of its research themes in the context of the available skill sets and capacity. Four research groups with multiple sub-themes provides a broad portfolio which needs to be considered carefully in view of the relatively small staff cohort together with the teaching and administrative roles of many staff members.

## 6. **Resources (Human, Financial)**

We were extremely impressed with the commitment of **ALL** the staff we met. We recognize the breadth and volume of activity entailed in satisfying the School's strategic ambitions and University expectations in the context of the staffing capacity. Student contact hours for clinical dental academics exceed norms of other academic environments by a wide margin. Whilst there is regular job planning, there is an absence of a functioning workload model in the School. We recommend that such a model be developed by the School. We anticipate that this would highlight excessive workloads and provide some objective evidence for concerns held by the review team members over staff exhaustion and potential burnout.

The review team was not able to obtain clarity on the tracking of hospital financial allocations to service provision and education. We recommend that the Trinity work to obtain transparency with regard to Hospital costs relating to service provision and those that are directly linked to delivery of clinical teaching and learning.

At present there is excellent collaboration between the Clinical Director and the Dean of School. The current organizational structure of the DDUH requires a collaborative and strong working relationship between these two senior post-holders for success of the institution, with potential risks resulting from future staffing changes. There is a clear document outlining Governance in areas of interdependency between the Hospital and School with the exception of financial regulation. Nevertheless, there is a perceived risk to the School

arising out of potential future personnel changes and loss of organisational memory. The risk may well be mitigated by a review of the employment status of the clinical academic staff group.

The current employment status of clinical academic staff totally excludes them from an academic promotions pathway. A solution does not lie within the School or the Hospital and we recommend that this be escalated to a higher level i.e. Trinity and the Hospital Board. Dublin Dental Hospital has a unique employment structure in that all but three of the School's academic staff members are technically employed by the Dental Hospital. The staff work as a unified group to deliver the academic and clinical objectives but there is a risk that recruitment abroad of key individuals may weaken the School in the future. In addition, job planning and appraisal could be assured to align to the School research strategy if the staff were directly accountable to Trinity.

## **7. School governance, management and administrative structures**

Student feedback on the contact and service from the Academic Registry was positive in contrast with feedback from some of the staff members. We particularly wish to recognize the excellent work of all administrative staff within the DDUH who have buffered both staff and students from the potential disruption arising from the establishment of the Academic Registry and its subsequent re-organisation. The quality of the DDUH administrative support was strongly reflected in comments by the student body.

We were reassured that there were good systems for information governance and safe-guarding in all locations.

## **8. Recommendations**

- The Governance agreement for DDHU and Trinity be enhanced by inclusion of a transparent funding model and a solution to current employment of clinical academics which precludes access to a promotions process.
- The establishment of a formal academic staff workload model.
- A further consideration of the breadth of the Research Strategy and whether additional focus is required.
- We encourage enhanced collaboration between Trinity Research Institutes and School of Dental Science. We suggest benefit from School of Dental Science Research Theme leads attending Trinity Research Institute meetings.
- The School should establish mechanisms to ensure that all research projects (staff and student) are aligned to the School's research strategy.
- We recommend that post-doctoral fellows have representation on the School's Research Committee.
- Establish an approval process in advance of grant application along with peer review of submissions to enhance success rate.
- Allocation of research supervisors for PGR students should be managed by the Research Director and all students should have two named supervisors.
- Enhancement of interprofessional Teaching and Learning both within the School and across Healthcare

## Professions in Trinity.

- Establishment of a staff student forum.
- Completion of the curriculum mapping exercise and its extension to all undergraduate programmes as a means to ensure reduced congestion of curricula, design for interprofessional teaching and learning and modern application of applied sciences.
- Caution should be exercised in launching new courses without allocation of dedicated additional staffing.
- We note that PGT courses comprised small cohort sizes. We recommend a review of the course structure and consideration of potential to establish a core programme with subsidiary subject specialist modules.
- Consider recording expanded equality and diversity data for students and first employment location data for all graduates.

## 4. Conclusions

- The School of Dental Sciences meets all the current standards expected of a well-established, highly functional clinical academic unit.
- We are impressed by the enthusiasm, professionalism and collaborative culture within the School, the excellent administrative team and the strong leadership exhibited by the Dean and Clinical Director.
- There is a coherent and well-structured strategy for the Dental School which is aligned to many of Trinity's aspirations.
- Staff and students show great loyalty to Trinity.
- Despite conflicting priorities, staff are working hard to deliver a wide range of programmes for UG and PGT students as well as supervising PGR students.
- External factors do inhibit potential for growth and reduction in potential for research funding is a concern.
- The future stability of the School will be dependent upon attracting and retaining high quality clinical academic and science colleagues. In the absence of access to an academic promotions pathway for clinical academics, loss of key staff and challenges in staff recruitment are major risks to the School. We strongly encourage the senior managers at Trinity and the Dental Hospital to find a way to resolve the issues around access to staff promotion opportunities.
- The School is providing a much-needed public service in delivering high quality dental professionals to sustain public health and safety.

## **2. Response from the School of Dental Science**

### **Overview**

The staff and students of the School of Dental Science would like to thank all of those who facilitated and participated in the recent Quality Review. We appreciate the considerable efforts involved in preparation for the review, so that our meetings were productive and informative. The reviewers not only embraced the volumes of material for their consideration, but demonstrated the utmost respect for all the stakeholders they encountered.

The School is grateful for the recognition of a dedicated and skilled staff, who are deeply invested in providing excellent, student-centred programmes. The review points out that this is supported by an appropriate strategic plan for 2015-9 and that we have made considerable progress in this regard. The School is committed to delivering the strategy, including curriculum mapping, the e-Portfolio, digital workflow and Continuing Professional Development. We also agree that the Hospital Board and University should be acknowledged for providing state-of-the-art clinical and teaching facilities for the programmes we deliver. The School of Dental Science is encouraged by the Quality Review's positive assessment of our fundamental direction and performance; we are grateful for the suggestions and recommendations in the report.

### **Recommendations of the Report**

The Quality Reviewers' Report notes that external pressures and reduced funding have made it challenging to offer the range and diversity of programmes in the School of Dental Science. The report cautions against further expansion of roles without commensurate resources; this risks the academic development of the School and the growth of its research output. The School is cognizant of this risk and wants to prioritise academic quality over new teaching programmes. At the same time we have made substantial progress with a simple and transparent funding model between DDUH and College. The School fully supports the development of a promotion scheme for clinical academic staff as a necessary part of the attraction and retention of staff.

It is suggested that a more formal workload allocation model should be developed to address the pressure of work and conflicting priorities for academic staff. Formal staff appraisal and job planning are relatively new in the School and have helped to clarify some of these issues. We will explore the continued evolution of this process to ensure that work is allocated equitably, while allowing staff to work to their strengths and ensuring that the School's strategic direction is supported.

The Quality Review highlighted the comprehensive but congested Dental Science curriculum—this is a feature of changing professions where new technology and content is added faster than traditional

material is abandoned. The report approves of the School's current curriculum mapping exercise and recommends that it be used to identify unnecessary or repetitious content. We agree that this is a worthwhile effort and will consider carefully the extension of learning outcomes to the e-Portfolio. While decongestion of the curriculum may alleviate some stress on students, and a staff-student forum would improve communication, the report also suggests that there be a formalised tutor-initiated support process. We will ensure that the College services have this feedback on the tutor system.

The report recognises that progress has been made in sharing learning opportunities across undergraduate programmes. Nonetheless, we will continue to integrate the courses and we have just begun to implement true interprofessional learning. This will require structures at Faculty level and we have engaged with the Faculty liaison officer to make sure that students from the School of Dental Science will be included in the initiative. We acknowledge comments in the report that Allied Professions Programmes lag behind Dental Science in aspects of their delivery and assessment—the School is committed to the evolution of all its courses to the same high standards.

The Quality Review report raises a number of important issues regarding research and this has been helpful. Overall, it is recommended that the School rationalize and focus its research efforts. Our recent strategic plan reduced the research themes in the School from seven to four, which has allowed us to include all research-active staff and align well with College research themes. There may be scope to reduce this further if any theme does not progress. We understand the benefit of focusing student and staff research more on these themes and also to ensure that appropriate research supervisors are appointed. Investigators seeking research funding would benefit from closer support and mentoring, and post-doctoral researchers should be more involved in research strategy. We acknowledge that the School would benefit from more collaborations with College research institutes and centres.

We look forward to further discussion of the Quality Review report with the Dean of the Faculty of Health Science, the College authorities and the Board of the Dublin Dental Hospital. Based on these discussions the School will develop an implementation plan to address the recommendations of the report.

### 3. Response from the Dean of the Faculty of Health Sciences

I very much welcome the report of the Quality Review team, and the reviewers' recommendations provide a very useful road map for the school going forward. I am particularly pleased that many of the issues identified and their recommendations mirror a number of the key objectives outlined in the School's Strategic Plan 2014-2019.

The Review team were particularly impressed with the leadership of the School and the Hospital Executive, supported by an excellent administrative team, and I echo this finding.

The review team highlighted that the range and diversity of the courses offered and the pressure this exerts. The School has also undertaken vast work in curriculum re-mapping, development of e-Portfolios and the utilization of online resources such as Blackboard, all of which are positive steps towards reducing the conflicting priorities for staff and these are measures I am wholly supportive of.

The report recognises that progress has been made in sharing learning opportunities across undergraduate programmes; The Faculty has provided a resource in the form of a two-year Assistant Professorship post to drive Interprofessional Learning (IPL) across the schools within the Faculty and is pleased that the School's Director for Undergraduate Teaching & Learning is continually engaging with the developments of IPL across the Faculty, with a view to strong integration of IPL within the Dental curriculum as well as the auxiliary courses.

I appreciate the reviewer's acknowledgement that the clinical and learning facilities are excellent; There has been significant investment in these facilities by both the School and Faculty and we are pleased to present a state of the art facility for our students.

The School acknowledged that its wide range of research focus areas represented a major challenge and has taken steps to streamline its research to consolidate its research outputs. I am very supportive of this strategic move on the part of the School, and I strongly support the reviewers' recommendation that closer collaborations be established with the Trinity Research Institutes, which would potentially lead to access to appropriate shared research facilities within the thematic areas. The suggestion of a mechanism to direct all student and staff projects to the agreed research themes along with a peer review process to assure quality and high success rates for grant applications is also welcomed.

I agree with the Head of School's assertion that we have made substantial progress with a simple and transparent funding model between DDUH and College, and support the ongoing work in this regard which will ensure that funding is transferred from Faculty to the School of Dental Science with every effort being made to maintain transparency and to support a model which will facilitate a better understanding of the cost of dental education at Trinity College.

*Prof. Mary McCarron.*