



University College Dublin

Periodic Quality Review

UCD School of Biomolecular and Biomedical Science

November 2019

Accepted by the UCD Governing Authority at its meeting of 25 June 2020

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Key Findings of the Review Group

The Review Group has identified a number of key findings in relation to areas of good practice operating within the School and areas which the Review Group would highlight as requiring future improvement. The main section of this Report sets out all observations, commendations and recommendations of the Review Group in more detail. An aggregated list of all commendations and recommendations is set out in Appendix 1.

Examples of Good Practice

The Review Group identified a number of commendations, in particular:

- the impressive collegiality of all faculty and staff within the School, and their commitment to their roles and responsibilities within the School;
- the delivery of an outstanding and innovative portfolio of undergraduate programmes and the high quality of students that graduate from these;
- the implementation and growth of innovative and interdisciplinary taught Masters programmes, ensuring that the School is a leading destination for home, EU and non-EU students;
- the success of the School researchers, notwithstanding the compromised funding environment, in securing substantial, internationally-leading, grant awards, allowing Biomolecular and Biomedical Science-led researchers be at the forefront of their respective disciplines;
- the strong culture of partnering students and staff with external organisations and stakeholders, ensuring that the School contributes significantly to UCD's local, national and international reputation.

Recommendations for Future Improvement

The Review Group would suggest that the following be prioritised:

- The School needs to be more proactive in ensuring that the University addresses the scattered location of its spaces; the School makes a strong case that the distribution of its spaces, whether they be for research, teaching, or administration, causes inefficiencies and creates disadvantages.
- The School needs to advocate with the College and the University, for resources which will allow the maintenance and replacement of essential equipment items required for the delivery of teaching and a fit-for-purpose research environment.

- The School should ensure that the examples of best practice associated with teaching and learning, feedback, assessment, and moderation, are consistently embedded in every module as required by University regulations.
- The School should ensure that postgraduate tutors and demonstrators are fully supported in the teaching roles they take on, including through regular module coordinator meetings.
- The School should develop a culture of recognition for its administrative and technical staff, and should herald within the University, their significant contribution to the School's success.
- The School should ensure that its highly regarded teaching and research activities are communicated internally and externally, to maximise visibility and to ensure recognition of achievements.

1. Introduction and Overview of UCD School of Biomolecular and Biomedical Science

Introduction

- 1.1 This report presents the findings of a periodic quality review of the School of Biomolecular and Biomedical Sciences, (SBBS) University College Dublin, which was undertaken between 18-21 February 2019. The School response to the Review Group Report is attached as Appendix 2.

The Review Framework

- 1.2 Irish Universities have collectively agreed a framework for their quality review and quality improvement systems, which is consistent with both the legislative requirements of the Qualifications and Quality Assurance (Education and Training) Act 2012, and international good practice (e.g. Standards and Guidelines for Quality Assurance in the European Higher Education Area, 2015). Quality reviews are carried out in academic, administrative and support service units, on a seven-year cycle.

- 1.3 The purpose of periodic review is to assist the University to assure itself of the quality of each of its constituent units, and to utilise learning from this developmental process in order to effect improvement, including:

- To monitor the quality of the student experience, and of teaching and learning.
- To monitor research activity, including: management of research activity; assessing the research performance with regard to: research productivity, research income, and recruiting and supporting doctoral students.
- To identify, encourage and disseminate good practice, and to identify challenges and how to address these.
- To provide an opportunity for units to test the effectiveness of their systems and procedures for monitoring and enhancing quality and standards.
- To encourage the development and enhancement of these systems, in the context of current and emerging provision.
- To inform the University's strategic planning process.
- The output report provides robust evidence for external accreditation bodies.
- The process provides an external benchmark on practice and curriculum.

- To provide public information on the University's capacity to assure the quality and standards of its awards. The University's implementation of its quality procedures enables it to demonstrate how it discharges its responsibilities for assuring the quality and standards of its awards, as required by the Universities Act 1997 and the Qualifications and Quality Assurance (Education and Training) Act 2012.

The Review Process

1.4 Typically, the review model comprises four major elements:

- Preparation of a self-assessment report (SAR)
- A visit by a review group (RG) that includes UCD staff and external experts, both national and international. The site visit normally will take place over a two or three day period
- Preparation of a review group report that is made public
- Agreement of an action plan for improvement (quality improvement plan) based on the RG report's recommendations. The University will also monitor progress against the improvement plan

Full details of the review process can be found on the UCD Quality Office website: www.ucd.ie/quality.

The Review Group

1.5 The composition of the Review Group for the UCD School of Biomolecular and Biomedical Sciences was as follows:

- Professor Tadhg O'Keeffe (Chair), UCD School of Archaeology
- Associate Professor Fionnuala Dillane (Deputy Chair), UCD School of English, Drama and Film
- Professor Christiane Hertz-Fowler, University of Liverpool
- Professor David Wyllie, University of Edinburgh

1.6 The Review Group visited the School from 18-21 February 2019 and held meetings with School staff; undergraduate and postgraduate students; the SAR Co-ordinating Committee; other University staff, including the College Principal. The site visit schedule is included as Appendix 3.

1.7 In addition to the Self-assessment Report, the Review Group considered documentation provided by the School and the University before and during the site visit.

Preparation of the Self-assessment Report (SAR)

- 1.8 Following a briefing from the UCD Quality Office representatives in April 2018, a Self-assessment Report Coordinating Committee (SARCC) was established. The committee was chaired by the Head of School and members of the committee, in consultation with staff members and student representatives, drafted sections of the Self-assessment Report.
- 1.9 The School liaised with the Quality Office during the drafting phase and the final report was submitted to the UCD Quality Office in February 2019.

The University

- 1.10 University College Dublin (UCD) is a large and diverse university whose origins date back to 1854. The University is situated on a large modern campus about 4 km to the south of the centre of Dublin.
- 1.11 The University Strategic Plan (2015 to 2020) states that the University's mission is: "to contribute to the flourishing of Dublin, Ireland, Europe and the world through the excellence and impact of our research and scholarship, the quality of our graduates and our global engagement; providing a supportive community in which every member of the University is enabled to achieve their full potential".

The University is currently organised into six colleges and 37 schools

- UCD College of Arts and Humanities
- UCD College of Business
- UCD College of Engineering and Architecture
- UCD College of Health and Agricultural Sciences
- UCD College of Social Sciences and Law
- UCD College of Science

- 1.12 As one of the largest universities on the island of Ireland, UCD supports a broad, deep and rich academic community in Science, Business, Engineering, Health Sciences, Agriculture, Veterinary Medicine, Arts, Law, Celtic Studies and Human Sciences. There are currently more than 26,000 students in our UCD campus (approximately 16,300 undergraduates, 7,800 postgraduates and 2,200 Occasional and Adult Education students) registered on over 70 University degree programmes, including over 6,300 international students from more than 121 countries. The University also has over 5,400 students studying UCD degree programmes on campuses overseas.

UCD School of Biomolecular and Biomedical Science

- 1.13 The School was founded in 2005 from the former Departments of Biochemistry, Microbiology, Pharmacology and Physiology. It is one of seven Schools in the College of Science.
- 1.14 Programmes delivered include five single major Bachelor of Science programmes, six taught Master of Science programmes, as well as Professional Certificate and Professional Diploma courses. These programmes have a high take up rate among UCD students.
- 1.15 The School also offers four thematic and structured PhD programmes, which align with the School's research themes.
- 1.16 The School's contribution to programmes owned by other Schools includes 42 undergraduate programmes, six taught Masters programmes and eight research postgraduate programmes.
- 1.17 Two of the Master of Science programmes are delivered in collaboration with the UCD Michael Smurfit Graduate Business School (Biotechnology and Business and Biotherapeutics and Business). The Master of Science Biological and Biomolecular Science programme is delivered with the UCD School of Biology and Environmental Science, with the Directorship rotating between the two Schools.

2. Organisation and Management

General comments

- 2.1 This is a large and well-organised school with five specific disciplinary areas (Biochemistry; Genetics; Microbiology; Neuroscience; Pharmacology). The School community is dedicated to achieving success in its core activities of Research & Innovation, and Teaching.
- 2.2 The School has a complex organisational and reporting structure. There are 21 school committees, 10 of which report directly to the School's Executive Committee, and 10 of which report indirectly through the School's Teaching & Learning Committee. Financial matters are overseen by the Head of School and the School Manager, in consultation with the College of Science Accountant.
- 2.3 The School's spaces for research, teaching and administration are not concentrated in one location but are scattered across five buildings, within which some of those spaces are themselves widely dispersed and the RG recognises that this creates challenges across the entire spectrum of School activities.

- 2.4 The School's substantial and ambitious five-year strategic plan (2015-2020) is modelled on the University's Strategic Plan, and matters of organisation and management are addressed *inter alia* in this plan.

Commendations

- 2.5 The School's complex organisational structure is transparent and has buy-in from both faculty and staff. It appears to achieve one of its principal drivers: the avoidance of micromanagement.
- 2.6 The RG commends the practice of having graduate representation on the School Executive Committee.
- 2.7 The School is collegiate and offers its faculty and staff a supportive working environment, despite the considerable logistical challenges created by its uniquely fractured geography.
- 2.8 The School has met most of the targets it set in its strategic plan, including the submission of an Athena Swan Silver Award application, for example, which has required a considerable investment of time and effort.
- 2.9 The Head of School has earned, and enjoys, the respect of his colleagues for his leadership.
- 2.10 The efforts of the School's professional staff, administrative and technical, in maintaining its many operations, are widely and expressly appreciated at School and College level.

Recommendations

- 2.11 Although the roles of the School's committees are generally understood, those roles would benefit from much clearer articulation than was presented in the SAR. The processes of reviewing and clarifying the remit of each committee will improve the performance of each committee and will help the School to identify gaps in its procedures.
- 2.12 The School should schedule periodic reviews of the effectiveness of each committee in delivering its remit and in communicating its findings and recommendations to School members.
- 2.13 The School's Executive Committee should maintain active oversight of the membership of School committees, ensuring that all members of staff have an opportunity to serve on committees should they wish to.
- 2.14 Given its size, the School might consider whether benefits would accrue from the creation of a Finance Committee, under the Head of School, or whether the responsibility for School finances should be shared by the Executive Committee.

3. Staff and Facilities

General Comments

- 3.1 The School has 102 current members: 41 faculty, 3 academic/research on contracts of indefinite duration, 39 research, 19 support. There are 69 research postgraduate students.
- 3.2 The School has 6 administrative staff, one of whom is currently on secondment to another area, and 14 technical staff, one of whom is on a post-retirement contract.
- 3.3 The profile of seniority among faculty is consistent with that of other Schools in the University: 17 at Assistant Professor grade, 10 at Associate Professor grade, 11 at Professor grade, and 3 at Full Professor grade. There is a gender imbalance at the two most senior grades, which is also consistent with the discipline and with the University trend overall.
- 3.4 The School has a Workload Allocation Model for faculty, in which account is taken of Research, Teaching & Learning, and Contribution. The workloads of administrative and technical staff members are managed by the School Manager and Chief Technical Officer respectively.
- 3.5 Members of faculty have been successful – 90% - in applying for promotions since the University introduced its new promotion system in 2016. Promotion opportunities are limited for professional staff, reflecting the situation in the current Irish Education environment.
- 3.6 School members contribute substantially to the College and University. In addition to those who serve on committees outside the School, six members of the School's faculty have senior roles in the University (three on secondment as Directors of Institutes or Research Centres, two as Vice-Principals, and two as Associate Deans).
- 3.7 School staff are scattered among a number of buildings. The Conway Institute accommodates 78% of the School's research staff, while the remainder, including the Head of School, and both administrative and technical staff, are located within parts of the Science Centre and Health Sciences Building.

Commendations

- 3.8 Members of the School staff are hardworking, conscientious, and generous of spirit, and there is a strong sense of community.
- 3.9 The School has embraced the goals of the Athena Swan Charter, and its application for an Athena Swan Silver Award is a carefully considered roadmap for addressing historical gender inequalities within its disciplinary areas.

- 3.10 Members of the School's faculty and staff engage actively with orientation, induction and development programmes, regardless of their career position.
- 3.11 Faculty within the School are encouraged by senior members of faculty to apply for promotion.

Recommendations

- 3.12 The School needs to be more proactive in ensuring that the University addresses what it identifies as inefficiencies caused by, and disadvantages created by, the scattered location of its spaces, whether they be for research, teaching, or administration. Its suggested medium-term solution – that space be consolidated in two locations, the Science Centre and the Conway Institute Building – should be communicated to the University Management Team (UMT) alongside a clear articulation of the problems created by the current distribution of spaces.
- 3.13 The School should consider preparing in consultation with the School of Biology and Environmental Science, a document for UMT, in which the considerable strategic benefits of co-location to *both* schools, and indeed to the College of Science, are clearly identified.
- 3.14 The School has no direct role in the governance of the Conway Institute; however, given that its activities contribute so significantly to the Institute's reputation, a case for a role is very strong, it should articulate to UMT its argument for a role in the governance of the Institute.
- 3.15 In consultation with the College Principal and the UMT, the School should engage directly with the Director of the Conway Institute to resolve any problems of delay in the allocation of research and office space in the Institute.
- 3.16 Given that there are no 'calls' in the new promotion system, the School should be systematic in reminding faculty that they can apply for promotion at any point. In encouraging staff to avail of the new system, the School's senior faculty should, in line with the School's commitment to the Athena Swan Charter, be cognisant of the gender imbalance at senior levels.
- 3.17 In addition to its engagement with the University's pilot programme supporting newly appointed faculty, the School should review how it provides bespoke mentorship to its own Early Career Researchers, including, but not limited to, postdoctoral researchers, to ensure that they are provided with guidance and opportunities in a context that is consistent, structured and transparent.
- 3.18 The School might consider how, working under the umbrella of the Athena Swan application and recognising that their administrative support staff which is entirely female, it might advocate within the University, for a promotional structure that properly rewards a valuable cohort in its community.

- 3.19 The School and the University in general, should consider how long-term staff in professional service roles are provided with the opportunity to expand and develop their roles.

4. Teaching, Learning and Assessment

General Comments

- 4.1 The School delivers an excellent and diverse portfolio of undergraduate and taught postgraduate programmes.
- 4.2 The majority of students entering the University under the Science DN200 Programme ultimately graduate in one of the 5 streams offered by the School.
- 4.3 The RG recognises that student numbers in Neuroscience and Pharmacology have to be capped due to resource limitations.

Commendations

- 4.4 The RG recognised that members of faculty and staff go to great lengths to break down the complexity of the programme structures and to guide students through choices available to them; by and large, students felt that sufficient support systems and guidance were in place.
- 4.5 In their first two years, students are empowered to make informed and meaningful decisions about the disciplines and specific programmes in which they wish to study for their degrees. This is reflected in the high progression rates through the programme and to degree completion.
- 4.6 There are good practices in some areas of the curriculum – for example, mixed styles of assessment – and the School takes seriously the need to ensure consistency of delivery and quality transparent feedback, in which the assessment criteria are clearly articulated.
- 4.7 The RG would like to commend, in particular, the outstanding investment in first-year learning, in the stage one core module, SCI10010 ‘Principles of Scientific Enquiry’, which includes: group project skills; collaborative learning; close interaction between students and faculty.
- 4.8 RG supports the plan to introduce teaching assistantships to support the delivery of undergraduate teaching and to mitigate the shortfall in PhD numbers, and to help protect PhD students from heavy teaching burdens.

Recommendations

- 4.9 The School should consider how best to ensure consistency in assessment and feedback across programmes. Discussions highlighted a lack of marking rubric, feedback and moderation practices across teaching teams; the availability of model answers, where appropriate, could also be considered. The RG acknowledged that the new academic regulations would help to address some of these recommendations.
- 4.10 The School should consider what training needs to be provided to those who teach on modules, particularly PhD students, to ensure that their practices are aligned with School and University assessment practices.
- 4.11 The School should continue to monitor the mechanisms by which teaching quality is assessed, as well as the measures used to ensure faculty is appropriately trained.
- 4.12 The School should consider offering third and fourth year students the opportunity – perhaps through a specific module for which they could get credit – to help out with laboratory practicals; this might relieve some of the pressure on PhD student demonstrators and would also help undergraduate students to develop their own teaching skills.
- 4.13 The RG noted the concern of the School, in maintaining and replacing core equipment required in the delivery of undergraduate practical classes, and strongly recommends that the College and/or University provide funds that will ensure the School is able to maintain its highly regarded practical portfolio.

5. Curriculum Development and Review

General comments

- 5.1 A Curriculum and Enhancement Review was carried out between 2015 and 2017 and led, as the RG observed, to significant improvements and innovations.
- 5.2 The School has recently expanded its portfolio of taught Masters programmes and now delivers six programmes, some of which are co-taught with other Schools. These programmes attract graduates from home, and from EU and non-EU countries.

Commendations

- 5.3 Recommendations from the Curriculum and Enhancement Review have been taken up and implemented in dynamic and innovative ways, including the internship programme.
- 5.4 The RG recognises that both undergraduate and taught postgraduate programmes are well-received by students, and graduates from these programmes are highly sought after in industry, as they are regarded as capable, flexible and mature, and have the requisite disciplinary knowledge.
- 5.5 There is a clear industry buy-in to these programmes and there is enthusiasm and willingness to offer placements to these students.
- 5.6 The RG commends the high level of practical content associated with many of the modules and the high quality of the teaching labs, which offer students facilities on a par with other institutions with strong teaching portfolios.
- 5.7 The School ensures that curriculum content meets the training needs of students, delivering curriculum innovation in exciting ways. The RG noted, for example, innovation around the application of genomic technologies and bioinformatics training.

Recommendations

- 5.8 The School might consider how further to engage potential employers in ensuring that the curriculum meets employer requirements. In so doing, it will build on the willingness of industry, observed by the RG, to make suggestions around programme content and to participate in programmes leading to professional accreditation. In this context, the need to address the issue of access to space in the Conway Institute remains important.
- 5.9 Viewing the curriculum in its entirety, the School should consider how best to support students in their second year of undergraduate programme. Much effort and attention is afforded to students transitioning into the UCD environment for the first year and then into specific degree programmes for years three and four. The provision of guidance, mentorship and pastoral care for second year students appeared less clear, and closer interaction with faculty for this year-group would be beneficial, particularly as students are required to make choices for year three/four.

6. Research Activity

General Comments

- 6.1 The School contains a diverse research portfolio, with nearly all faculty being deemed research active.
- 6.2 Several of the research programmes are considered highly innovative with potential for significant societal impact in the longer term.
- 6.3 Research within the School is internationally recognised as evidenced by several multi-million grant awards secured in recent years.
- 6.4 The School's research space is distributed across the UCD campus and as such, researchers in the School are members of a variety of research institutes and centres.

Commendations

- 6.5 In recent years, the School's researchers have been lead authors or co-authors on high-profile publications in leading international journals.
- 6.6 There is an innovation culture within the School that in recent years has given rise to 22 invention disclosures, 12/43 successful patent applications, and 9 spin-out companies.
- 6.7 There are several examples of strong and productive collaborations between School colleagues, which also cross the University's research centres and institutes.
- 6.8 There are high-quality opportunities for research training of postgraduate students and postdoctoral researchers.

Recommendations

- 6.9 The School should consider how best to build on its areas of research excellence in order to facilitate the strengthening of a research culture. In doing this, consideration should be given to the potential advantages and disadvantages of devolving research strategy to Research Centres and Institutes.
- 6.10 During recruitment processes, consideration should be given to how best any potential new appointment would not only fulfil teaching needs, but would also provide synergy with existing research.
- 6.11 Consideration should be given to having an 'away day(s)' so that all members of the School have an awareness of the diverse research activity in the School.

- 6.12 Given the diversity of the School's research portfolio, consideration should be given to how to strengthen further collaborative research activity that would help the School position itself for major funding bids.
- 6.13 The School Research Committee should review the current themes to ensure that they reflect appropriately, the nature of research currently undertaken by School members. Consideration should be given to having 'theme-promoting' activities such as, seminars, mini-symposia, PhD/MSc student presentations.
- 6.14 School members are strongly encouraged to share grant proposals at drafting-stage with peers. This may require the School putting in place formal structures such as, workshops wherein proposals are presented to colleagues for feedback. Such structures will encourage early career researchers to engage with senior faculty at early stages when preparing funding applications.
- 6.15 Given the diverse locations of School's research activity, consideration should be given to creating opportunities for all PhD students and postdoctoral researchers to have a forum where they can meet peers. In time, this could expand to allow for a mentoring scheme that facilitates career progression.
- 6.16 The School has an established workload model. Newly appointed faculty in the School should have a reduced teaching portfolios in their early years in order to allow them establish their research programmes.
- 6.17 While the RG recognises the commitment of PhD students to contribute to undergraduate teaching activity, there is a risk to the School, given the downward trend in numbers of PhD students in recent years, that the burden of such activity may increase and impact on PhD students ability to conduct their own research (in particular demonstrator contracts).
- 6.18 The RG noted the recruitment initiatives that exist and suggest that the School explore with other institutes outside Ireland, whether partnerships could be created that offer collaborative training programmes at national and international level.
- 6.19 The RG notes the School's concern to replace communal 'small item' research equipment (less than €10,000). Consideration should be given to whether researchers should contribute an annual research levy to build a fund that can be used to offset some of the costs associated with replacing or repairing equipment. The RG suggests that the School considers how funds received from OBRSS might be used for this purpose.
- 6.20 Consideration should be given to how best to promote the research and impact of that research carried out by colleagues within the School, to an audience beyond the School, College and the University. Given the prevalence and importance of social media, the School could explore the opportunities this affords to promote its research.

7. Management of Quality and Enhancement

General Comments

- 7.1 The School systematically reviews the quality of its teaching programme, both in content and delivery. Each of the five Bachelor of Science programmes has its own oversight committee, and the Masters of Science Module Coordinator Committee has oversight of the six masters' programmes.
- 7.2 The School's Teaching & Learning Committee and Master of Science Management Committee ensure that recommended improvements are communicated to, and rolled out across, the entire School community.
- 7.3 The Educational Board of Eurotox, the Federation of International Societies of Toxicology in Europe, periodically reviews the structure and content of the School's Master of Science in Regulatory Affairs & Toxicology.
- 7.4 The School faculty and staff have a strong record of enrolling in training and development courses offered by the University.

Commendations

- 7.5 The School identifies the need for regular reviews of its courses, and has put in place a thorough and rigorous structure for the carrying out of such reviews.
- 7.6 Student feedback is encouraged and listened to, and the School is willing to make changes in response to that feedback.
- 7.7 The School promotes training courses and programmes offered by the University, and its faculty and staff members are encouraged to enrol in these.
- 7.8 The School has fully embraced Performance for Growth (P4G).

Recommendations

- 7.9 The School is encouraged to maintain its rigorous approach to quality assurances and, for the benefit of ensuring the widest possible exposure of its faculty and staff to the review process, to rotate regularly, the memberships of the committees that lead the curriculum review.

8. Support Services

General Comments

- 8.1 The School works closely and effectively with a range of UCD support services across a variety of different contexts, including UCD Library, IT Services, College of Science Office, UCD Research, UCD Career Development Centre (CDC), UCD HR and NovaUCD.
- 8.2 This engagement facilitates predominantly, student-learning supports, teaching and learning activity, research activity and research impact and commercialisation opportunities.
- 8.3 The College Office support is primarily provided in relation to the internship programme through the College Internship Manager.
- 8.4 Both the Library and the Career Development Centre provide expert teaching into modules at both undergraduate and postgraduate level, in a formal capacity and offer a range of learning and career support opportunities for students (and postdoctoral staff) in more optional capacity. NovaUCD provides lectures to MSc students in Business and Biotherapeutics.
- 8.5 The School's impressive success in establishing Spinout and Start-Up companies has been enabled by the close relationship with NovaUCD.
- 8.6 UCD Research, in addition to supporting grant-funding applications, has worked closely with the School in the development of important links with industrial partners and Development Agencies.
- 8.7 School staff are aware of, and use, the learning, student support, administrative and research platforms and systems available through InfoHub.

Commendations

- 8.8 The embedding of expertise from the Library, the Career Development Centre, and NovaUCD offers students invaluable additional learning opportunities.
- 8.9 The expansion of the internship programme to undergraduate students is a hugely positive development, and the very positive and productive relationship with the College of Science Internship manager in relation to this development is to be noted.
- 8.10 The facilitation of proactive channels of engagement between NovaUCD and the School via coffee mornings, individual one-to-one consultations with faculty members, boot-camps and accelerator programmes, for early stage intervention to either best support or redirect commercial initiatives.
- 8.11 UCD Global and the College's Associate Dean for Study Abroad support the inward flow of full time and semester and year-long international students.

Recommendations

- 8.12 The College Internship Manager is clearly doing excellent work but has a significant range of placement responsibilities. Further resourcing is needed in this area to ensure that the newly developed undergraduate internship modules and the already established Master of Science internship modules are fully supported while also facilitating expansion.
- 8.13 While acknowledging the welcome and popular incorporation into Stages 1-3 of the undergraduate programme of the 'series of elements' that develop career related skills, consideration might be given to a more formal embedding of a 'Career Readiness' module in the undergraduate programme to ensure that all students have awareness of, and access to, career advice and preparation.
- 8.14 There is potential for the School to publicise and actively promote fuller engagement with the Training and Development Services for postdoctoral faculty offered by the Career Development Centre.
- 8.15 Students expressing difficulty with the writing of reports were unaware of the supports available in the UCD Writing Centre. Module coordinators could take a more active role in promoting this support service where appropriate.
- 8.16 The School should embrace the potential of a fuller engagement with support offered by UCD Global, in order to expand outward mobility of undergraduate students in particular.

9. Collaborative Provision

General Comments

- 9.1 The School does not have any joint degree with other universities.
- 9.2 The School supports the outward and inward mobility of students at undergraduate and postgraduate levels.
- 9.3 The School hosts Chinese students pursuing four-year PhD projects through the Chinese Scholarship Scheme (facilitated by a formal agreement between UCD and the Chinese Government).

Commendations

- 9.4 The opportunity for learning and development of intercultural awareness provided by formal exchange programme for Bachelor of Science students, that allows up to four students to complete their fourth-year research project in the University of Copenhagen.
- 9.5 Open and welcome accommodation of undergraduate study abroad, postgraduate and doctoral level students to complete some or all of their degree work in the School.

Recommendations

- 9.6 Expand exchange partnerships to further promote and encourage take up of outward mobility opportunities at undergraduate level in particular.

10. External Relations

General Comments

- 10.1 The School demonstrates depth and breadth in its number of collaborations with external Partners.
- 10.2 It has maintained a high number of publications with both international collaborators and industry partners.
- 10.3 The School has close collaborations with industry partners that fund School research including major global companies including Glanbia and Bayer.
- 10.4 A recent MOU between UCD and Bristol-Myer-Squibb, offers the potential to leverage the School's reputation for research excellence in areas relevant to the biopharmaceutical industry, to further benefit undergraduate and postgraduate training and internship opportunities.
- 10.5 The School is engaged in high impact, externally funded collaborations with industry and local authorities, government departments and government agencies.
- 10.6 The School takes an active approach in promoting scientific research and scientific cultures to the wider community through its workshops, summer schools, ENGAGE programme and non-specialised publications for Schools.
- 10.7 The School provides significant input into UCD and College of Science recruitment activities, including open days, open evenings, undergraduate and graduate fairs.

Commendations

- 10.8 The RG commends the range of productive, high-impact collaborations with a range of Irish-based global industries and European partnerships, including collaborations that have secured major research grants.
- 10.9 The RG commends the major EU-funded international collaborations involving a range of EU-based institutions including the provision of significant opportunities for exchange for all members (academic, research, technical and administrative) in the School.

- 10.10 The RG recognises the value of the appointment of adjunct faculty with business backgrounds to formalise the means by which industry experts help to develop undergraduate and postgraduate programmes.
- 10.11 The internship programme run in conjunction with industry partners at undergraduate and postgraduate levels, is highly regarded by both the industry partner and students.
- 10.12 External partners working with the School on projects, internship programmes or UCD-based lab facilities were highly complementary of the openness, collegiality, flexibility and expertise of faculty and professional staff once approached.
- 10.13 The RG commends the School collaboration with, or its advisory roles in respect of, a range of local authorities and government bodies, and its involvement in significant funded regional development projects that significantly enhances the School, College and the University's contribution to the regional and national environment.
- 10.14 The School has a range of positive and innovative public engagement initiatives involving number of highly committed faculty and doctoral students, including the successful 'ENGAGE' programme, popular summer schools and publications for schools.

Recommendations

- 10.15 External partners involved in internship placements with the School indicate that outgoing undergraduate students might benefit from more formal support in the management of career expectations.
- 10.16 The School should take a more proactive role in approaching industry, local authority and government partners, in relation to expertise sharing.
- 10.17 The School should establish a School-based rota for outreach and engagement activities so the burden of staffing and running such events does not fall repeatedly on the same personnel. Activities that promote the School and its subjects should be supported by faculty and staff in the School.
- 10.18 The School should expand the very positive internal newsletter initiative across digital/web-based platforms to promote more fully the distinctive activities, achievements and innovative developments of the School across research, teaching and learning to both academic and wider, non-specialist communities.

UCD School of Biomolecular and Biomedical Science – Full List of Commendations and Recommendations

This Appendix contains a full list of all commendations and recommendations made by the Review Group for the UCD School of Biomolecular and Biomedical Science and should be read in conjunction with the specific chapter above. *(Please note that the paragraph references below refer to the relevant paragraphs in the report text)*

2. Organisation and Management

Commendations

- 2.5 The School's complex organisational structure is transparent and has buy-in from both faculty and staff. It appears to achieve one of its principal drivers: the avoidance of micromanagement.
- 2.6 The RG commends the practice of having graduate representation on the School Executive Committee.
- 2.7 The School is collegiate and offers its faculty and staff a supportive working environment, despite the considerable logistical challenges created by its uniquely fractured geography.
- 2.8 The School has met most of the targets it set in its strategic plan, including the submission of an Athena Swan Silver Award application, for example, which has required a considerable investment of time and effort.
- 2.9 The Head of School has earned, and enjoys, the respect of his colleagues for his leadership.
- 2.10 The efforts of the School's professional staff, administrative and technical, in maintaining its many operations, are widely and expressly appreciated at School and College level.

Recommendations

- 2.11 Although the roles of the School's committees are generally understood, those roles would benefit from much clearer articulation than was presented in the SAR. The processes of reviewing and clarifying the remit of each committee will improve the performance of each committee and will help the School to identify gaps in its procedures.
- 2.12 The School should schedule periodic reviews of the effectiveness of each committee in delivering its remit and in communicating its findings and recommendations to School members.

- 2.13 The School's Executive Committee should maintain active oversight of the membership of School committees, ensuring that all members of staff have an opportunity to serve on committees should they wish to.
- 2.14 Given its size, the School might consider whether benefits would accrue from the creation of a Finance Committee, under the Head of School, or whether the responsibility for School finances should be shared by the Executive Committee.

3. Staff and Facilities

Commendations

- 3.8 Members of the School staff are hardworking, conscientious, and generous of spirit, and there is a strong sense of community.
- 3.9 The School has embraced the goals of the Athena Swan Charter, and its application for an Athena Swan Silver Award is a carefully considered roadmap for addressing historical gender inequalities within its disciplinary areas.
- 3.10 Members of the School's faculty and staff engage actively with orientation, induction and development programmes, regardless of their career position.
- 3.11 Faculty within the School are encouraged by senior members of faculty to apply for promotion.

Recommendations

- 3.12 The School needs to be more proactive in ensuring that the University addresses what it identifies as inefficiencies caused by, and disadvantages created by, the scattered location of its spaces, whether they be for research, teaching, or administration. Its suggested medium-term solution – that space be consolidated in two locations, the Science Centre and the Conway Institute Building – should be communicated to the University Management Team (UMT) alongside a clear articulation of the problems created by the current distribution of spaces.
- 3.13 The School should consider preparing in consultation with the School of Biology and Environmental Science, a document for UMT, in which the considerable strategic benefits of co-location to both schools, and indeed to the College of Science, are clearly identified.
- 3.14 The School has no direct role in the governance of the Conway Institute, however, given that its activities contribute so significantly to the Institute's reputation, a case for a role is very strong, it should articulate to UMT its argument for a role in the governance of the Institute.
- 3.15 In consultation with the College Principal and the UMT, the School should engage directly with the Director of the Conway Institute to resolve any problems of delay in the allocation of research and office space in the Institute.

- 3.16 Given that there are no 'calls' in the new promotion system, the School should be systematic in reminding faculty that they can apply for promotion at any point. In encouraging staff to avail of the new system, the School's senior faculty should, in line with the School's commitment to the Athena Swan Charter, be cognisant of the gender imbalance at senior levels.
- 3.17 In addition to its engagement with the University's pilot programme, supporting newly appointed faculty, the School should review how it provides bespoke mentorship to its own Early Career Researchers, including, but not limited to, postdoctoral researchers, to ensure that they are provided with guidance and opportunities in a context that is consistent, structured and transparent.
- 3.18 The School might consider how, working under the umbrella of the Athena Swan application and recognising that their administrative support staff is entirely female, it might advocate within the University, for a promotional structure that properly rewards a valuable cohort in its community.
- 3.19 The School and the University in general, should consider how long-term staff in professional service roles are provided with the opportunity to expand and develop their roles.

4. Teaching, Learning and Assessment

Commendations

- 4.4 The RG recognised that members of faculty and staff go to great lengths to break down the complexity of the programme structures and to guide students through choices available to them; by and large, students felt that sufficient support systems and guidance were in place.
- 4.5 In their first two years, students are empowered to make informed and meaningful decisions about the disciplines and specific programmes in which they wish to study for their degrees. This is reflected in the high progression rates through the programme and to degree completion.
- 4.6 There are good practices in some areas of the curriculum – for example, mixed styles of assessment – and the School takes seriously the need to ensure consistency of delivery and quality transparent feedback, in which the assessment criteria are clearly articulated.
- 4.7 The RG would like to commend, in particular, the outstanding investment in first-year learning, in the stage one core module, SCI10010 'Principles of Scientific Enquiry', which includes: group project skills; collaborative learning; close interaction between students and faculty.

- 4.8 RG supports the plan to introduce teaching assistantships to support the delivery of undergraduate teaching and to mitigate the shortfall in PhD numbers, and to help protect PhD students from heavy teaching burdens.

Recommendations

- 4.9 The School should consider how best to ensure consistency in assessment and feedback across programmes. Discussions highlighted a lack of marking rubric, feedback and moderation practices across teaching teams; the availability of model answers, where appropriate, could also be considered. The RG acknowledged that the new academic regulations would help to address some of these recommendations.
- 4.10 The School should consider what training needs to be provided to those who teach on modules, particularly PhD students, to ensure that their practices are aligned with School and University assessment practices.
- 4.11 The School should continue to monitor the mechanisms by which teaching quality is assessed, as well as the measures used to ensure faculty is appropriately trained.
- 4.12 The School should consider offering third and fourth year students the opportunity – perhaps through a specific module for which they could get credit – to help out with laboratory practicals; this might relieve some of the pressure on PhD student demonstrators and would also help undergraduate students to develop their own teaching skills.
- 4.13 The RG noted the concern of the School, in maintaining and replacing core equipment required in the delivery of undergraduate practical classes, and strongly recommends that the College and/or University provide funds that will ensure the School is able to maintain its highly regarded practical portfolio.

5. Curriculum Development and Review

Commendations

- 5.3 Recommendations from the Curriculum and Enhancement Review have been taken up and implemented in dynamic and innovative ways, including the internship programme.
- 5.4 The RG recognises that both undergraduate and taught postgraduate programmes are well-received by students, and graduates from these programmes are highly sought after in industry, as they are regarded as capable, flexible and mature, and have the requisite disciplinary knowledge.
- 5.5 There is a clear industry buy-in to these programmes and there is enthusiasm and willingness to offer placements to these students.

- 5.6 The RG commends the high level of practical content associated with many of the modules and the high quality of the teaching labs, which offer students facilities on a par with other institutions with strong teaching portfolios.
- 5.7 The School ensures that curriculum content meets the training needs of students, delivering curriculum innovation in exciting ways. The RG noted, for example, innovation around the application of genomic technologies and bioinformatics training.

Recommendations

- 5.8 The School might consider how further to engage potential employers in ensuring that the curriculum meets employer requirements. In so doing, it will build on the willingness of industry, observed by the RG, to make suggestions around programme content and to participate in programmes leading to professional accreditation. In this context, the need to address the issue of access to space in the Conway Institute remains important.
- 5.9 Viewing the curriculum in its entirety, the School should consider how best to support students in their second year of undergraduate programme. Much effort and attention is afforded to students transitioning into the UCD environment for the first year and then into specific degree programmes for years three and four. The provision of guidance, mentorship and pastoral care for second year students appeared less clear, and closer interaction with faculty for this year-group would be beneficial, particularly as students are required to make choices for year three/four.

6. Research Activity

Commendations

- 6.5 In recent years, the School's researchers have been lead authors or co-authors on high-profile publications in leading international journals.
- 6.6 There is an innovation culture within the School that in recent years has given rise to 22 invention disclosures, 12/43 successful patent applications, and 9 spin-out companies.
- 6.7 There are several examples of strong and productive collaborations between School colleagues, which also cross the University's research centres and institutes.
- 6.8 There are high-quality opportunities for research training of postgraduate students and postdoctoral researchers.

Recommendations

- 6.9 The School should consider how best to build on its areas of research excellence in order to facilitate the strengthening of a research culture. In doing this, consideration should be given to the potential advantages and disadvantages of devolving research strategy to Research Centres and Institutes.

- 6.10 During recruitment processes, consideration should be given to how best any potential new appointment would not only fulfil teaching needs, but would also provide synergy with existing research.
- 6.11 Consideration should be given to having an 'away day(s)' so that all members of the School have an awareness of the diverse research activity in the School.
- 6.12 Given the diversity of the School's research portfolio, consideration should be given to how to strengthen further collaborative research activity that would help the School position itself for major funding bids.
- 6.13 The School Research Committee should review the current themes to ensure that they reflect appropriately, the nature of research currently undertaken by School members. Consideration should be given to having 'theme-promoting' activities such as, seminars, mini-symposia, PhD/MSc student presentations.
- 6.14 School members are strongly encouraged to share grant proposals at drafting-stage with peers. This may require the School putting in place formal structures such as, workshops wherein proposals are presented to colleagues for feedback. Such structures will encourage early career researchers to engage with senior faculty at early stages when preparing funding applications.
- 6.15 Given the diverse locations of School's research activity, consideration should be given to creating opportunities for all PhD students and postdoctoral researchers to have a forum where they can meet peers. In time, this could expand to allow for a mentoring scheme that facilitates career progression.
- 6.16 The School has an established workload model. Newly appointed faculty in the School should have a reduced teaching portfolios in their early years in order to allow them establish their research programmes.
- 6.17 While the RG recognises the commitment of PhD students to contribute to undergraduate teaching activity, there is a risk to the School, given the falling numbers of PhD students in recent years, that the burden of such activity may increase and impact on PhD students ability to conduct their own research (in particular demonstrator contracts).
- 6.18 The RG noted the recruitment initiatives that exist and suggest that the School explore with other institutes outside Ireland, whether partnerships could be created that offer collaborative training programmes at national and international level.
- 6.19 The RG notes the School's concern to replace communal 'small item' research equipment (less than €10,000). Consideration should be given to whether researchers should contribute an annual research levy to build a fund that can be used to offset some of the costs associated with replacing or repairing equipment. The RG suggests that the School considers how funds received from OBRSS might be used for this purpose.

- 6.20 Consideration should be given to how best to promote the research and impact of that research carried out by colleagues within the School, to an audience beyond the School, College and the University. Given the prevalence and importance of social media, the School could explore the opportunities this affords to promote its research.

7. Management of Quality and Enhancement

Commendations

- 7.5 The School identifies the need for regular reviews of its courses, and has put in place a thorough and rigorous structure for the carrying out of such reviews.
- 7.6 Student feedback is encouraged and listened to, and the School is willing to make changes in response to that feedback.
- 7.7 The School promotes training courses and programmes offered by the University, and its faculty and staff members are encouraged to enrol in these.
- 7.8 The School has fully embraced Performance for Growth (P4G).

Recommendations

- 7.9 The School is encouraged to maintain its rigorous approach to quality assurances and, for the benefit of ensuring the widest possible exposure of its faculty and staff to the review process, to rotate regularly, the memberships of the committees that lead the curriculum review.

8. Support Services

Commendations

- 8.8 The embedding of expertise from the Library, the Career Development Centre, and NovaUCD offers students invaluable additional learning opportunities.
- 8.9 The expansion of the internship programme to undergraduate students is a hugely positive development, and the very positive and productive relationship with the College of Science Internship manager in relation to this development is to be noted.

- 8.10 The facilitation of proactive channels of engagement between NovaUCD and the School via coffee mornings, individual one-to-one consultations with faculty members, boot-camps and accelerator programmes, for early stage intervention to either best support or redirect commercial initiatives.
- 8.11 UCD Global and the College's Associate Dean for Study Abroad support the inward flow of full time and semester and year-long international students.

Recommendations

- 8.12 The College Internship Manager is clearly doing excellent work but has a significant range of placement responsibilities. Further resourcing is needed in this area to ensure that the newly developed undergraduate internship modules and the already established Master of Science internship modules are fully supported while also facilitating expansion.
- 8.13 While acknowledging the welcome and popular incorporation into Stages 1-3 of the undergraduate programme of the 'series of elements' that develop career related skills, consideration might be given to a more formal embedding of a 'Career Readiness' module in the undergraduate programme to ensure that all students have awareness of, and access to, career advice and preparation.
- 8.14 There is potential for the School to publicise and actively promote fuller engagement with the Training and Development Services for postdoctoral faculty offered by the Career Development Centre.
- 8.15 Students expressing difficulty with the writing of reports were unaware of the supports available in the UCD Writing Centre. Module coordinators could take a more active role in promoting this support service where appropriate.
- 8.16 The School should embrace the potential of a fuller engagement with support offered by UCD Global, in order to expand outward mobility of undergraduate students in particular.

9. Collaborative Provision

Commendations

- 9.4 The opportunity for learning and development of intercultural awareness provided by formal exchange programme for Bachelor of Science students, that allows up to four students to complete their fourth-year research project in the University of Copenhagen.
- 9.5 Open and welcome accommodation of undergraduate study abroad, postgraduate and doctoral level students to complete some or all of their degree work in the School.

Recommendations

- 9.6 Expand exchange partnerships to further promote and encourage take up of outward mobility opportunities at undergraduate level in particular.

10. External Relations

Commendations

- 10.8 The RG commends the range of productive, high-impact collaborations with a range of Irish-based global industries and European partnerships, including collaborations that have secured major research grants.
- 10.9 The RG commends the major EU-funded international collaborations involving a range of EU-based institutions including the provision of significant opportunities for exchange for all members (academic, research, technical and administrative) in the School.
- 10.10 The RG recognises the value of the appointment of adjunct faculty with business backgrounds to formalise the means by which industry experts help to develop undergraduate and postgraduate programmes.
- 10.11 The internship programme run in conjunction with industry partners at undergraduate and postgraduate levels, is highly regarded by both the industry partner and students.
- 10.12 External partners working with the School on projects, internship programmes or UCD-based lab facilities were highly complementary of the openness, collegiality, flexibility and expertise of faculty and professional staff once approached.
- 10.13 The RG commends the School collaboration with, or its advisory roles in respect of, a range of local authorities and government bodies, and its involvement in significant funded regional development projects that significantly enhances the School, College and the University's contribution to the regional and national environment.
- 10.14 The School has a range of positive and innovative public engagement initiatives involving number of highly committed faculty and doctoral students, including the successful 'ENGAGE' programme, popular summer schools and publications for schools.

Recommendations

- 10.15 External partners involved in internship placements with the School indicate that outgoing undergraduate students might benefit from more formal support in the management of career expectations.

- 10.16 The School should take a more proactive role in approaching industry, local authority and government partners, in relation to expertise sharing.
- 10.17 The School should establish a School-based rota for outreach and engagement activities so the burden of staffing and running such events does not fall repeatedly on the same personnel. Activities that promote the School and its subjects should be supported by faculty and staff in the School.
- 10.18 The School should expand the very positive internal newsletter initiative across digital/web-based platforms to promote more fully the distinctive activities, achievements and innovative developments of the School across research, teaching and learning to both academic and wider, non-specialist communities.

UCD School of Biomolecular and Biomedical Science – Response to the Review Group Report –

The task of developing the Self-assessment Report was a valuable reflective exercise, which facilitated the School to review its position from a number of perspectives, highlight and confirm our strengths and opportunities, identify areas of good practice and evaluate our weaknesses and challenges in a systematic way. The Review Group Site Visit was a positive and constructive experience. We welcome the endorsement of the Review Group for our activities through commendations and will carefully consider the recommendations during the Quality Improvement Planning process.

There was a high level of engagement from all staff categories and from the student community, both in compiling the Self-assessment Report and in interacting with the Review Group during the site visit. The School wishes to thank the Review Group for their time, expertise and constructive comments, both at the visit and in their helpful Report.

With specific reference to the prioritised recommendations identified by the Review Group, the School's initial proposals/comments are outlined below:

- (i) Recommendation A: The School needs to be more proactive in ensuring that the University addresses the scattered location of its spaces; the School makes a strong case that the distribution of its spaces, whether they be for research, teaching, or administration, causes inefficiencies and creates disadvantages.**

Proposal/Comment: The School wholeheartedly agrees with the Review Group. The scattered location of the School as well as the lack of control/influence over the allocation of office and laboratory space occupied by the School has been highlighted by the School since its foundation, including during the previous Quality Review in 2009. The School sees opportunities in the Development of Science West and North as part of phase III of the Science Centre Development.

- (ii) Recommendation B: The School needs to advocate with the College and the University, for resources which will allow the maintenance and replacement of essential equipment items required for the delivery of teaching and a fit-for-purpose research environment.**

Proposal/Comment: UCD recently launched the UCD EQUIP scheme which invests in core research equipment. SBBS staff have enthusiastically participated in this programme and collaborated with colleagues in other Schools and Institutes. This resulted in a significant investment in research facilities.

- (iii) **Recommendation C: The School should ensure that the examples of best practice associated with teaching and learning, feedback, assessment, and moderation, are consistently embedded in every module as required by University regulations.**

Proposal/Comment: This process has already started and has been implemented for most modules. The implementation of best practice associated with teaching is spearheaded by the SBBS Teaching and Learning Committee for our five undergraduate programmes, and by the MSc Management Committee for our six MSc programmes.

- (iv) **Recommendation D: The School should ensure that postgraduate tutors and demonstrators are fully supported in the teaching roles they take on, including through regular module coordinator meetings.**

Proposal/Comment: The School agrees with the Review Group that postgraduate tutors and demonstrators should be fully supported in their teaching role. They meet with the module coordinator prior to delivery of practical classes; however, the School will continue to ensure that postgraduate students are fully supported. BMOL40080: Teaching in Higher Education is a core module in the curriculum of postgraduate students. This module was initiated by the School with the express purpose to train and support postgraduate students in their teaching roles.

- (v) **Recommendation C: The School should develop a culture of recognition for its administrative and technical staff, and should herald within the University, their significant contribution to the School's success.**

Proposal/Comment: The School is already doing this, by amongst others, membership of and chairing of key School committees by technical and administrative staff, inclusion of technical and administrative achievements in the School newsletters. However, the School will, in consultation with the administrative and technical staff, increase its efforts in this respect.

- (vi) **Recommendation F: The School should ensure that its highly regarded teaching and research activities are communicated internally and externally, to maximise visibility and to ensure recognition of achievements.**

Proposal/Comment: The School is already very active in this area, including an ezine for alumni, an SBBS Newsletter, active participation in UCD and College of Science outreach events, as well as organisation of summer schools aimed at secondary school students. The School is also active on social media, including Twitter, LinkedIn and Facebook. In addition, our PhD students explain their research to the general public in the annual Engage seminar series, which is the School's flagship outreach programme. Our communication and outreach activities are coordinated by a member of our administrative staff, who has this in her portfolio, and by the School's Science Outreach Officer.



UCD School of Biomolecular and Biomedical Science

Site Visit Timetable

Monday 18 - Thursday 21 February 2019

Pre-Visit Briefing Prior to Site Visit – Monday 18 February 2019

17.00-19.00	RG to review preliminary issues and to confirm work schedule and assignment of tasks for the site visit – RG and UCD Quality Office only
19.30	Dinner hosted for the RG by the UCD Registrar and Deputy President – <u>RG, UCD Deputy President and UCD Quality Office only</u>

Day 1: Tuesday 19 February 2019

Venue: H1.47 O'Brien Centre for Science

09.00-09.30	Private meeting of Review Group (RG)
09.30 10.00	RG meet with College Principal, College of Science
10.00 10.45	RG meet with Head of School
10.45 11.15	Tea/coffee break
11.15 12.15	RG meet with SAR Coordinating Committee
12.15-12.45	Break – RG review key observations and prepare for lunch time meeting
12.45-13.45	Working lunch with representative group of undergraduate students
13.45-14.15	RG review key observations
14.15-15.30	RG meet with representative group of academic staff – primary focus on Teaching and Learning, and Curriculum
15.30-15.45	RG tea/coffee break

15.45-16.30	RG meet with support staff representatives (e.g. administrative / technical)
16.30-16.35	Break
16.35-17.00	RG meet with the Associate Dean for Science
17.00-17.20	RG meet the Programme Dean representative from College of Health Sciences (covering programmes in Medicine, Nursing, Physio)
17.20-18.15	Tour of facilities – Science Hub, Science East, Science South, Health Sciences, Science West, The Conway Institute
18.15	RG depart

Day 2: Wednesday 20 February 2019

Venue: H1.47 O'Brien Centre for Science

08.15-8.30	RG arrive at School, private meeting of the RG
8.30-9.45	RG meet relevant support service representatives
9.45-10:15	RG meet staff re Outreach (within College, University and Externally)
10.20-10.40	RG meet with a representative group of postgraduate students (taught MSc Programmes)
10.40-11.00	RG meet with a representative group of postgraduate students (research), and post doctorates
11.00-11.15	RG tea/coffee break
11.15-12.15	RG meet with the School Research Committee
12.15-12.30	Break - RG review key observations
12.30-13.30	Lunch – Review Group meeting with employers (and/or other external stakeholders), including graduates
13.30-13:45	RG private meeting - review key observations
13.45-14.15	RG meet with HR Partner

14.15-15.00	RG meet with College Finance Manager and Head of School to outline School's financial situation
15.00-15.15	Break
15.15-16.15	RG meet with recently appointed members of staff
6.15-17.15	RG available for private individual meetings with staff
17.15-18.00	RG private meeting – review key observations/findings
18.00	RG depart

Day 3: Thursday 21 February 2019

Venue: H1.47 O'Brien Centre for Science

09.00-09.30	Private meeting of RG
09.30-10.30	RG prepare draft RG Report
10.30-10.45	Break
10.45-12.00	RG continue preparing draft RG Report
12.00-12.30	RG finalise first draft of RG Report and feedback commendations/recommendations
12.30-13.15	Lunch
13.15-13.30	RG meet with College of Science, Professor to feedback initial outline commendations and recommendations
13.30-13.45	RG meet with Head of School, Professor to feedback initial outline commendations and recommendations
14.00-15.00	Leeway for flexibility with meetings
15:00	Exit presentation to <u>all available staff of the unit</u> –summarising the principal commendations/recommendations of the Review Group.
15:30	Review Group depart