University College Dublin

Periodic Quality Review

NovaUCD

October 2011

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1. Introduction and Context

Introduction

1.1 This Report presents the findings of a quality review of NovaUCD, at University College Dublin, which was undertaken in October 2011. The response of NovaUCD to the Review Group Report is attached as Appendix 1.

The Review Process

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 Universities Act 1997, and international good practice (e.g. Standards and Guidelines for Quality Assurance in the European Higher Education Area, 2007). Quality reviews are carried out in academic, administrative and support service units.

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 essentially developmental process in order to effect improvement, including :

- To monitor the quality of the student experience, and of teaching and learning opportunities

- 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 provide an opportunity for units to test the effectiveness of their systems and procedures for monitoring and enhancing quality and standards

- To provide a framework within which the unit can continue to work in the future towards quality improvement

- To identify shortfalls in resources and provide an externally validated case for change and/or increased resources

- To identify, encourage and disseminate good practice

- To identify challenges and address these

- 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 review procedures also 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.

1.4   Typically, the review model comprises of 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.

1.5   The composition of the Review Group for NovaUCD was as follows:

- Professor Michael Monaghan, Project Director, UCD Science Project (Chair)

- Dr Sinead Critchley, Director of UCD Academic Secretariat (Deputy Chair)

- Dr Derek Waddell, Director of Research and Commercialisation, University of Edinburgh

- Dr Brian Kelly, Director, Technology Commercialization & Liaison, Cornell Center for Technology Enterprise and Commercialization

1.6   The Review Group visited NovaUCD from 10-13 October 2011 and held meetings with NovaUCD staff, the VP for Innovation, internal and external stakeholders and internal University staff. The site visit schedule is included as Appendix 2.

1.7   In addition to the Self-assessment Report, the Review Group considered documentation provided by the Unit and the University during the Site Visit.

1.8   The Review Group wish to thank NovaUCD for the courtesy and professionalism with which they were received, and the co-operation of the Acting Director and staff during the site visit.

1.9   The Review also wish to thank the former Director of NovaUCD who was actively involved in the preparation of the SAR and who retired shortly before the commencement of the site visit.

Preparation of the Self-assessment Report

1.10   The Unit set up a Self-assessment Co-ordinating Committee in accordance with the UCD Quality Office Guidelines. The Co-ordinating Committee met 7 times between October 2010 and the review site visit.

        The members of the Co-ordinating Committee were:
        - Dr Pat Frain, Chair
        - Helen McGrath, Deputy Chair
        - Miceal Whelan
        - Dr Ciaran O'Beirne
        - Caroline Gill
        - Dr Ciara Leonard
        - Thomas Hamill
        - Karina King
        - Jackie Boyd Lyons

The University

1.11   University College Dublin (UCD) is a large and diverse university whose origin dates back to 1854. The University is situated on a large, modern campus, about 4km to the south of the centre of Dublin.

1.12   The University Strategic Plan (to 2014) states that the University's Mission is:

        "to advance knowledge, to pursue truth and to foster learning, in an atmosphere of discovery, creativity, innovation and excellence, drawing out the best in each student, and contributing to the social, cultural and economic life of Ireland in the wider world".

        The University is organised into 38 Schools in seven Colleges;
        - UCD College of Arts and Celtic Studies
        - UCD College of Human Sciences
        - UCD College of Science
        - UCD College of Engineering and Architecture
        - UCD College of Business and Law
        - UCD College of Health Sciences
        - UCD College of Agriculture, Food Science and Veterinary Medicine

1.13   As one of the largest universities on the island of Ireland, UCD supports a broad, deep and rich academic community in Science, Engineering, Medicine, Veterinary Science, Arts, Celtic Studies and Human Sciences. There are currently more than 24,000 students (15,400 undergraduates, 6,900 postgraduates and 1,900 Occasional and Adult Education students) registered on University programmes, including over 4,600 international students from more than 120 countries.

2. Overview of NovaUCD

2.1   NovaUCD was established in 2003 to support innovation and knowledge transfer (KT) at University College Dublin (UCD). As a University unit with 16 staff members, NovaUCD is responsible for the commercialisation of intellectual property (IP) arising from research programmes and other knowledge-intensive activity at UCD and for the development of co-operation with the industry and business communities.

2.2   NovaUCD, as a facility, is a purpose-built centre dedicated to the development of a community of innovators and entrepreneurs and to nurturing new technology and knowledge-intensive enterprises. It offers a range of programmes through two separate entities:

- NovaUCD, a University support unit, funded by the University, commercial income and other sources such as Enterprise Ireland, Dun Laoghaire Rathdown County Enterprise Board, and the Higher Education Authority.

- UCD Nova Ltd, a self-financing limited company and a subsidiary of UCD, established in 2002 as a tax vehicle for the construction of NovaUCD's facilities. The company is funded through the management of its facilities which include licensing of incubation units, maintenance, utilities, and related support activities.

2.3   The Unit's activities are focused around four key areas:

- Managing technology transfer and implementing the University's policies on intellectual property arising from research programmes

- Supporting the incubation of start-up companies

- Promotion of a culture of innovation and entrepreneurship within the University

- Building Partnerships and creation of knowledge transfer networks.

2.4   The Review Group welcomed the opportunity to meet with NovaUCD staff and to engage in dialogue with a range of key stakeholders during the site visit. The Review

Group commends the team for their professional approach to service provision, including but not limited to support for technology transfer, enterprise development and communications, which is held in high regard by client companies. The Review Group noted that while the NovaUCD team would appear to be under-resourced, they have not allowed this to adversely impact client relationship management, in many cases going above and beyond any reasonable expectation of their core functions.

3. Planning, Organisation and Management

3.1   Strategic Planning and Organisation

3.1.1   The Review Group recognises that NovaUCD has been through a period of significant organisational change and uncertainty arising from the retirement of the Director, the vacant Vice-President for Innovation post, the UCD-TCD Innovation Alliance and unanticipated delays to the call for the Enterprise Ireland Technology Transfer Strengthening Initiative (TTSI) 2 funding application.   The team are to be commended for continuing to provide a comprehensive and co-ordinated range of professional services to key stakeholders during this period.

3.1.2   The Review Group notes the recent appointment to the position of Vice-President for Innovation and the imminent restructuring of the Office of Vice-President for Innovation, which will include the recruitment of a Director for Enterprise and Commercialisation.

Commendations:

3.1.3   NovaUCD is widely recognised as the leading national innovation and technology transfer centre, funded by a public-private partnership, evidenced by a substantial and growing development in Intellectual Property, significant expertise in supporting academic entrepreneurs in successful spin-out companies, its leadership role in knowledge transfer, and the attraction by UCD companies of more than $200million in investments and realisations.

3.1.4   NovaUCD staff are to be commended for their continued provision of a comprehensive, co-ordinated and professional services to its stakeholders during a period of significant organisation change.

3.1.5   The Review Group welcomes the appointment to the post of Vice-President for Innovation and proposed recruitment of a Director for Enterprise and Commercialisation.

Recommendations:

3.1.6   The Vice-President for Innovation should, as a matter of priority, take steps to address whatever uncertainty may remain as to the future role of NovaUCD and facilitate dialogue with the NovaUCD team in order to articulate a clearer vision of their role in driving forward innovation as the third pillar of the core mission at UCD.

3.1.7   Establishment of appropriate governance and advisory structures at University level, and re-establishment of local management meetings are key to supporting the activities of NovaUCD, and in this regard the Review Group recommends a range of actions:

- Advisory Board – An Innovation Advisory Board with a range of specialist sub committees should be constituted as a matter of priority with an independent chair (who could be a senior member of University staff) and with both internal and external representation. The sub-committees would report on NovaUCD activities and seek input from the board.

- IP Advisory committee – While NovaUCD should have confidence in its own decision-making, particularly where this is backed up by clear IP policies, transparent decision-making and consistent involvement of the inventor(s) in the decision-making process, the Review Group agrees that a panel of IP experts would be useful for referral of difficult IP issues.

- UCD-TCD Alliance – The Vice-President for Innovation should take a lead role in informing the NovaUCD staff of progress with the Alliance to date and plans for the future. Progress updates should be provided at regular staff meetings.

- KT Policy Development – NovaUCD should review, update and further develop all policies affecting NovaUCD operations.   There is an existing UCD process/template for review of policies which should facilitate this process.

3.2   Human Resources and Management

3.2.1   The Review Group met with the Vice-President for Innovation, the Technology Transfer Manager, the Operations Manager and several members of staff of NovaUCD.   It became clear that NovaUCD was embarking on a period of restructuring after the retirement of the former Director, and the appointment of the new Vice-President for Innovation who was also currently serving as the interim Director. At the time of the review, the position of Director of Enterprise and Commercialisation had been advertised.

3.2.2   The Review Group recognised the additional workload and added burden of responsibilities that any restructuring can put on an organisation and acknowledges

the commitment and professionalism of both the Technology Transfer Manger and Operations Manager during this period.

3.2.3   The committee management structure of NovaUCD seemed entirely reasonable for certain activities anticipated by the Unit.   However, the Review Group was concerned this may not be an appropriate structure by which to inform the entire office of all on-going NovaUCD activities.

3.2.4   The structure within NovaUCD was well organised with clear reporting lines. However, it was not clear how NovaUCD sought input from UCD or reported on its activities to UCD senior management.

3.2.5   It was noted that the legal counsel to NovaUCD had recently resigned to take up a position elsewhere and this appeared to leave a significant gap in the unit's capabilities and further increase the responsibilities of the Technology Transfer Manager.

3.2.6   The technology transfer team includes three project managers whose positions are currently supported under the Enterprise Ireland Technology Transfer Strengthening Initiative (TTSI).   While it is anticipated that the TTSI funding will be renewed, at least through to 2016, there are no guarantees that such funding will continue beyond this date.   The potential loss of these three positions to NovaUCD would have severe consequences for NovaUCD's technology transfer programme.

3.2.7   The Review Group noted that the technology transfer staff members were working to their capacity and that certain technology transfer tasks and projects needed additional resourcing.   Additionally, the negotiation of industry contracts was becoming increasingly burdensome to the technology transfer staff and a distraction from their core commercialisation activities. It was understood by the Review Group that senior management in UCD is aware of this and a resolution will be forthcoming.

3.2.8   The Review Group noted NovaUCD's commitment to the Performance Management Development (PMDS) process within the University and encouraged the technology transfer team to seek out educational and professional development opportunities to ensure that they maintain best practices.

3.2.9   There is a requirement for clarity on the respective roles of NovaUCD and the Business Development Managers (BDMs) now being appointed in schools and colleges to build on the synergies which already exist.

3.2.10 As organisations grow and undergo change, it is important to clarify just who is responsible and has authority for the signing of particular documents at NovaUCD and within the University.

Commendations:

3.2.11   The appointment of the new Vice-President for Innovation has created an opportunity for the University and NovaUCD to review the Unit's structure and organisation.

3.2.12   The engagement of NovaUCD staff to support this restructuring is to be commended.

3.2.13   NovaUCD has a well-developed expertise and experience in CPD, technology transfer, enterprise development and the establishment of industry partmerships.

3.2.14   The active engagement of NovaUCD staff in the University's Performance Management Development System creates professional development opportunities for staff.

Recommendations:

3.2.15   Regular "all office" staff meetings should be instituted to ensure greater awareness and co-ordination of all NovaUCD activities.

3.2.16   NovaUCD should replace the legal counsel or to have on-going legal services provided by UCD Office of Corporate and Legal Affairs. This should be resolved as part of the wider negotiations between the Vice-President for Innovation and the University.

3.2.17   Fixed term contracts for the technology transfer staff should be formalised as permanent contracts by the University.

3.2.18   The Technology Transfer Manager should consider developing an internship programme within NovaUCD that would employ students and postgraduates to work on a variety of defined projects.

3.2.19   The Technology Transfer team and NovaUCD should develop a professional development programme for its technology transfer professionals so as to maintain best practice; this could include attendance at professional development courses such as the Licensing Executive Society meetings and others.

3.2.20   Enterprise Development services should be supported financially at an appropriate level when the present incumbent takes up a new post.

3.2.21   The respective roles of BDMs and NovaUCD should be reconsidered when the guidelines for the TTSI2 funding are released.

3.2.22 Guidelines for engagement with School-based BDMs should be established to manage expectations and to ensure that opportunities for exchange of information and cross-selling of opportunities (including services) are not lost.

3.2.23 A clarifying document or policy should be developed to clarify who has signature authority responsibility for all documents that affect UCDNova's operations.

4. Functions, Activities and Processes

4.1 NovaUCD operates high-class incubation facilities with excellent levels of support to tenant companies which are appreciated by all companies interviewed.

4.2 NovaUCD's 'Equity for help model' (which was understood to mean that companies provided a proportion of their equity in exchange for access to the full range of services provided by NovaUCD) was not well understood by all of the companies interviewed.

4.3 Some of the incubated companies interviewed would utilise further service enhancement through provision of financial (book-keeping, payroll, auditing), PR, marketing and investor introduction services on a paid-for basis if it were made available.

4.4 Not all spin-in companies have allocated the required equity to NovaUCD, yet they still enjoy a full range of services.

4.5 NovaUCD provides a wide range of services to spin-in companies beyond standard incubation services, and these need to be recognised and compensated for.

4.6 Current licensing practice needs to be regularly reviewed to ensure that it aligns with current market norms.

4.7 No benefit from any equity exits seems to accrue to NovaUCD and this may act as a disincentive to the unit. Any such returns to NovaUCD could be reinvested in enterprise programmes.

4.8 Current arrangements for disbursement of royalty payments are too complicated.

4.9 The campus company programme is well-developed and is in many ways class-leading, as is the support provided by Enterprise Development services across a broad range of activities.

4.10 The Technology Transfer team are generating good levels of activity, despite being somewhat under-resourced for the range of activities that are expected by the University.

4.11   Standard technology transfer metrics are good with decent levels of disclosures, patents, licenses and company formations. There have been some substantial company exits.

4.12   Patenting process needs to be reviewed to ensure that the patent portfolio is balanced (there appears to be an imbalance with a higher than expected proportion of national phase patents).

4.13   Strong views were expressed by client companies about the shortage of parking spaces at NovaUCD and there is a willingness to pay for parking to solve this problem.

Commendations

4.14   The provision of incubation facilities and support to tenant companies is excellent, and the feedback from users clearly demonstrated this.

4.15   The current campus company programme and the support provision by the Enterprise Development services is well developed.

4.16   Despite its under-resourcing the Technology Transfer team are generating reasonable levels of activity.

Recommendations

4.17   Since the equity for help model may limit Nova's ability to secure a greater equity stake in companies where there is valuable IP licensed and where a larger equity stake may be more beneficial to UCD, alternative ways of presenting the deal should be considered which would give NovaUCD more flexibility.

4.18   Consideration should be given to charging for additional services to spin-in companies who only pay the space charge. There should be some clear differentiation between the services provided to spinout companies where 15% equity is taken, and spin-in companies where there may be no equity held.

4.19   NovaUCD should commence the process of negotiating a Service Level Agreement (SLA) with the University so that there is agreement on tasks to be done and the appropriate level of re-imbursement for these services.

4.20   NovaUCD should negotiate a Service Level Agreement (SLA) with UCD Nova to agree on tasks to be carried out and the charges to be levied for the existing facility and also for any new incubation facility.

4.21   Some benchmarking should take place with other Universities on licence deal structure types to ensure that appropriate terms are being negotiated.

4.22   NovaUCD should receive a share of equity sales for reinvestment in its programmes to stimulate enterprise, including a seed fund and this dialogue should commence with the University as part of the SLA discussions. The agreement reached with the University in 2000 regarding equity distribution should be revisited as part of these discussions.

4.23   A Licence Transfer Sheet containing all pertinent information (invoice timings, inventor shares, School shares, NovaUCD share etc.) should be provided to the Operations team for all licence deals to enable efficient subsequent invoicing. NovaUCD should consider procurement of an appropriate Customer Relations Management System.

4.24   NovaUCD needs approved access to the University's financial systems for disbursement of royalty payments in a more efficient way, or someone should be assigned from the Finance team to undertake these tasks.

4.25   NovaUCD is encouraged to review its patent portfolio, which contained a high percentage of national-phase patents, and associated patent expenditure.

4.26   Reserved parking for incubatee companies and some visitor parking spaces should be provided using models developed elsewhere in the University.

5. Management of Resources

5.1   *Finance and Reporting*

5.1.1   The Operations Manager is responsible for the financial management and reporting of the accounts of both NovaUCD and UCD Nova Ltd. The Operations Manager needs to work closely with the University to ensure that income and expenses are appropriately recorded and managed and that faculty inventors receive royalty payments which are due under the various royalty bearing license agreements. The Review Group was impressed by the quality and clarity of the reports produced by the Operations Manager but noted that certain information was neither routinely captured nor tracked. In discussions with the Operations Manager, it was clear that the management of NovaUCD and UCD Nova Ltd. financial accounts and the transfer of monies between NovaUCD, UCD Nova Ltd., and UCD were unnecessarily cumbersome.

5.1.2   NovaUCD is partly financed by UCD and external grants whereas, UCD Nova Ltd, is a self-financing entity whose profits are used to partly support NovaUCD. It is anticipated that NovaUCD will operate at a deficit in 2010/2011. However, the

Review Group understand that staff costs under UCD Nova Ltd, are borne by Nova UCD, contributing to the latter's deficit outcome. The Review Group recognise that NovaUCD operates on a lean budget and is inadequately financed and resourced particularly given the anticipated increase in activity and the strengthening of innovation at UCD. The Review Group recognises the need for NovaUCD to be more appropriately resourced. Good practice would also suggest that this should also include internal re-charging between the entities. The Review Group also believes that the appointment of the Vice-President for Innovation should assist with the discussions with UCD.

5.1.3   The Review Group was impressed by NovaUCD's Annual Report but noted that certain information such as, the invention disclosures received and commercial agreements that pertain to a particular faculty member's invention were not routinely reported to the Heads of School or University.

Commendations

5.1.4   The quality and provision of reporting such as NovaUCD's Annual Report is to be commended.

Recommendations

5.1.5   Information such as number of license and option agreements, number of royalty bearing licenses, number of confidentiality agreements, IP management agreements, patent expenses (both reimbursed and unreimbursed) and license revenue should be routinely tracked.

5.1.6   UCD and NovaUCD explore ways to better manage the transfer of finances between accounts.

5.1.7   Additional routine reporting of all NovaUCD activities to University senior management, College Principals and Heads of Schools should be undertaken. This report should include inventions disclosed, commercial agreements executed and other key performance indicators in order to raise awareness and recognition of NovaUCD activities on campus.

5.2   *Human Resources*

5.2.1   At the time of the review, the position of the Director of Enterprise and Commercialisation was vacant but had been advertised and at least one other member of staff at NovaUCD had recently resigned. The Review Group noted that succession planning did not seem to get the required amount of attention; this is even more important when resources are scarce.

5.2.2   In discussions with the Operations Manager, it became clear that the Operations Team was insufficiently staffed and needed an additional position to manage the financial affairs of NovaUCD and UCD Nova Ltd and to meet their expanding role, particularly given the likelihood that the team would be expected to provide management services for the recently purchased Belfield Office Park Buildings 9 and 10.

5.2.3   The Review Group noted that the deployment of Human Resources partners in other parts of the University had been successful, but that NovaUCD had not yet been provided with this service.

5.2.4   It was further noted by the Review Group that the Enterprise Development role in supporting incubated companies was highly valued by client companies. However, there was no direct recompense for this work, apart from the standard management fee.

5.2.5   As part of the new organisational structure within NovaUCD, the current Enterprise Development project manager will be assuming a new role.

Commendations

5.2.6   A new organisational structure for NovaUCD has been put in place following the appointment of the new Vice-President for Innovation. The recently purchased Belfield Office Park Buildings 9 and 10 may require additional resources.

5.2.7   The position of Director of Enterprise and Commercialisation has been advertised.

Recommendations

5.2.8   NovaUCD should engage in succession planning with respect to key positions within the unit and this should be led by the new Director of Enterprise and Commercialisation.

5.2.9   The Operations team require some additional resources especially with the prospect of the new incubation facility which it was assumed UCD Nova Ltd., will be asked to manage. The cost of an additional position should be included in the management charge to be agreed for the new facility.

5.2.10 NovaUCD should be provided with the services of a HR partner.

5.2.11 Enterprise Development services should be an additional charge and revenue source to UCDNova for both existing and future incubation facilities. This could be achieved by either an increase in the management fee and/or an increased rental charge to client companies.

5.2.12   With the current Enterprise Development Manager assuming a new role, the Review Group recommends that the post is replaced with a full-time executive who should be line-managed so as to minimise disruption and ensure continuity of service delivery.

6. Management of Quality and Enhancement

6.1   *General*

6.1.1   The Review Group believes that NovaUCD's approach to assessing and reviewing the quality of its operations is rigorous and comprehensive.

6.1.2   It is noted that regular staff meetings have not been taking place in recent times and that opportunities for communal reflection on processes and outcomes have been limited.

6.1.3   Survey data and interviews during the review process confirm that investigators within UCD and spin-in companies are very happy with the quality of the facilities and services offered by NovaUCD.

6.1.4   There are constituencies within UCD which have yet to be reached and made fully aware of NovaUCD's role in the University.

Commendations

6.1.5   NovaUCD is clearly engaged in managing and reviewing its processes and procedures.

6.1.6   Feedback from UCD investigators and spin-in companies indicates positive satisfaction with the quality of service provision and facilties.

Recommendations

6.1.7   NovaUCD should make time for reflection as a group on all of its policies, activities and any data available on outcomes.

6.1.8   A staff 'away-day' should take place in the near future to continue conversations instigated by the quality review process.

6.1.9   Regular staff meetings should be re-instituted immediately to enable sharing of information, rapid responses to recent developments and identification of significant issues which might require special consideration. The frequency, format and style of such meetings could be discussed on the away-day.

6.1.10 Generation of data on user views of services offered by NovaUCD should move beyond the use of questionnaires and include use of tools like focus groups, structured interviews with key personnel, and structured follow-up on anecdotal information to generate harder data for decision-making.

6.1.11 Consideration should be given to the production of a regular newsletter containing information on KPI's for NovaUCD for circulation to stakeholders.

6.2   *Policy Development and Review*

6.2.1   The establishment of Innovation as the third pillar of University strategy and the appointment of a Vice-President for Innovation will increase the role and visibility of NovaUCD within the University. It is also likely to result in significant change in policy and direction for NovaUCD.

6.2.2   The Vice-President for Innovation and the incoming Director of Enterprise and Commercialisation will instigate the development of new policies which will reflect the strategic importance of innovation in UCD.

Commendations

6.2.3   The expertise of the existing NOVA team together with its experience and local knowledge will be valuable as new policies are developed.

Recommendations

6.2.4   Staff meetings should be the primary vehicle for keeping NovaUCD abreast of changes in policy and direction.

6.2.5   The knowledge and experience of existing NovaUCD staff should be availed of in the development of new policies.

6.3   *Communication*

6.3.1   The Review Group noted that a range of internal and external constituencies perceived a measure of isolation of NovaUCD from the rest of the University which was only partly attributed to its geographical location on campus.

6.3.2   The NovaUCD brand is associated with the excellent incubation and incubation/entrepreneur support activities and not the other NovaUCD activities.

6.3.3   Communication challenges within NovaUCD have been outlined with recommendations in previous sections of this report.

Commendations

6.3.4 The brand of NovaUCD is clearly associated with the provision of excellent incubation and entrepreneur support activities.

Recommendations

6.3.5 A survey of UCD Schools' opinion, involving a range of engagement methodologies of NovaUCD services (including focus groups) would be useful.

6.3.6 There should be more proactive marketing of the range of NovaUCD services within UCD.

6.3.7 NovaUCD are strongly encouraged to hold most of their events within School/College facilities and to use their relationships with Business Development Managers to ensure this happens.

6.3.8 NovaUCD needs a presence/link on the University main web page and its own website should be revamped to make it more user-friendly.

7. Analysis of Strengths, Weaknesses, Opportunities and Challenges (Review Group)

7.1 <u>Strengths</u>

- Excellent incubation facility and support services to incubation companies.

- Excellent Campus Company Development programme and Enterprise Development services.

- Good record of company formations and equity realisations

- High levels of professionalism and dedication throughout the team.

7.2 <u>Weaknesses</u>

- Apparent lack of awareness of the range of services provided by NovaUCD within the University.

- The Unit is under-resourced in several key areas.

- Reliance on third-party funding for core technology transfer services.

- Lack of Advisory Board with appropriate internal and external representation.

- Lack of awareness within the NovaUCD team of current status of UCD/TCD alliance plans has led to uncertainty over future plans.

- Lack of regular all-staff meetings and cross team meetings.

7.3 Opportunities

- UCD/TCD alliance offers opportunities for sharing services and peer group improvements.

- Re-engagement with the University and a re-assessment of NovaUCD role and the funding required to properly undertake agreed tasks.

- Appointment of Vice-President for Innovation and Director of Commercialisation and Enterprise offer new opportunities for NovaUCD to grow.

- Creation of Central Contracts office should free up some of the time currently spent by Technology Transfer staff on contractual issues.

7.4 Challenges

- Aligning NovaUCD and TCD office responsibilities into the broader UCD/TCD alliance discussions.

- Achieving appropriate funding for NovaUCD operations.

- Uncertainty over TTSI continuation funding (but this should be resolved in the near future).
- General financial situation affecting the University is not conducive to discussions for additional funding.

8. Summary of Commendations and Recommendations

A. Planning, Organisation and Management

Strategic Planning and Organisation

Commendations:

3.1.3 NovaUCD is widely recognised as the leading national innovation and technology transfer centre, funded by a public-private partnership, evidenced by a substantial and growing development in Intellectual Property, significant expertise in supporting

academic entrepreneurs in successful spin-out companies, its leadership role in knowledge transfer, and the attraction by UCD companies of more than $200million in investments and realisations.

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3.2.17 Fixed term contracts for the technology transfer staff should be formalised as permanent contracts by the University.

3.2.18 The Technology Transfer Manager should consider developing an internship programme within NovaUCD that would employ students and postgraduates to work on a variety of defined projects.

3.2.19 The Technology Transfer team and NovaUCD should develop a professional development programme for its technology transfer professionals so as to maintain best practice; this could include attendance at professional development courses such as the Licensing Executive Society meetings and others.

3.2.20 Enterprise Development services should be supported financially at an appropriate level when the present incumbent takes up a new post.

3.2.21 The respective roles of BDMs and NovaUCD should be reconsidered when the guidelines for the TTSI2 funding are released.

3.2.22 Guidelines for engagement with School-based BDMs should be established to manage expectations and to ensure that opportunities for exchange of information and cross-selling of opportunities (including services) are not lost.

3.2.23 A clarifying document or policy should be developed to clarify who has signature authority responsibility for all documents that affect UCDNova's operations.

B. Functions, Activities and Processes

Commendations

4.14 The provision of incubation facilities and support to tenant companies is excellent, and the feedback from users clearly demonstrated this.

4.15 The current campus company programme and the support provision by the Enterprise Development services is well developed.

4.16 Despite its under-resourcing the Technology Transfer team are generating reasonable levels of activity.

Recommendations

4.17 Since the equity for help model may limit Nova's ability to secure a greater equity stake in companies where there is valuable IP licensed and where a larger equity stake may be more beneficial to UCD, alternative ways of presenting the deal should be considered which would give NovaUCD more flexibility.

4.18 Consideration should be given to charging for additional services to spin-out companies who only pay the space charge. There should be some clear differentiation between the services provided to spinout companies where 15% equity is taken, and spin-in companies where there may be no equity held.

4.19 NovaUCD should commence the process of negotiating a Service Level Agreement (SLA) with the University so that there is agreement on tasks to be done and the appropriate level of re-imbursement for these services.

4.20 NovaUCD should negotiate a Service Level Agreement (SLA) with UCD Nova to agree on tasks to be carried out and the charges to be levied for the existing facility and also for any new incubation facility.

4.21 Some benchmarking should take place with other Universities on licence deal structure types to ensure that appropriate terms are being negotiated.

4.22 NovaUCD should receive a share of equity sales for reinvestment in its programmes to stimulate enterprise, including a seed fund and this dialogue should commence

with the University as part of the SLA discussions. The agreement reached with the University in 2000 regarding equity distribution should be revisited as part of these discussions.

4.23   A Licence Transfer Sheet containing all pertinent information (invoice timings, inventor shares, School shares, NovaUCD share etc.) should be provided to the Operations team for all licence deals to enable efficient subsequent invoicing. NovaUCD should consider procurement of an appropriate Customer Relations Management System.

4.24   NovaUCD needs approved access to the University's financial systems for disbursement of royalty payments in a more efficient way, or someone should be assigned from the Finance team to undertake these tasks.

4.25   NovaUCD is encouraged to review its patent portfolio, which contained a high percentage of national-phase patents, and associated patent expenditure.

4.26   Reserved parking for incubatee companies and some visitor parking spaces should be provided using models developed elsewhere in the University.

C. Management of Resources

Finance and Reporting

Commendations

5.1.4   The quality and provision of reporting such as NovaUCD's Annual Report is to be commended.

Recommendations

5.1.5   Information such as number of license and option agreements, number of royalty bearing licenses, number of confidentiality agreements, IP management agreements, patent expenses (both reimbursed and unreimbursed) and license revenue should be routinely tracked.

5.1.6   UCD and NovaUCD explore ways to better manage the transfer of finances between accounts.

5.1.7   Additional routine reporting of all NovaUCD activities to University senior management, College Principals and Heads of Schools should be undertaken. This report should include inventions disclosed, commercial agreements executed and other key performance indicators in order to raise awareness and recognition of NovaUCD activities on campus.

Commendations

5.2.6   A new organisational structure for NovaUCD has been put in place following the appointment of the new Vice-President for Innovation. The recently purchased Belfield Office Park Buildings 9 and 10 may require additional resources.

5.2.7   The position of Director of Enterprise and Commercialisation has been advertised.

Recommendations

5.2.8   NovaUCD should engage in succession planning with respect to key positions within the unit and this should be led by the new Director of Enterprise and Commercialisation.

5.2.9   The Operations team require some additional resources especially with the prospect of the new incubation facility which it was assumed UCD Nova Ltd., will be asked to manage. The cost of an additional position should be included in the management charge to be agreed for the new facility.

5.2.10   NovaUCD should be provided with the services of a HR partner.

5.2.11   Enterprise Development services should be an additional charge and revenue source to UCDNova for both existing and future incubation facilities. This could be achieved by either an increase in the management fee and/or an increased rental charge to client companies.

5.2.12   With the current Enterprise Development Manager assuming a new role, the Review Group recommends that the post is replaced with a full-time executive who should be line-managed so as to minimise disruption and ensure continuity of service delivery.

D. Management of Quality and Enhancement

General

Commendations

6.1.5   NovaUCD is clearly engaged in managing and reviewing its processes and procedures.

6.1.6   Feedback from UCD investigators and spin-in companies indicates positive satisfaction with the quality of service provision and facilties.

Recommendations

6.1.7   NovaUCD should make time for reflection as a group on all of its policies, activities and any data available on outcomes.

6.1.8   A staff 'away-day' should take place in the near future to continue conversations instigated by the quality review process.

6.1.9   Regular staff meetings should be re-instituted immediately to enable sharing of information, rapid responses to recent developments and identification of significant issues which might require special consideration. The frequency, format and style of such meetings could be discussed on the away-day.

6.1.10   Generation of data on user views of services offered by NovaUCD should move beyond the use of questionnaires and include use of tools like focus groups, structured interviews with key personnel, and structured follow-up on anecdotal information to generate harder data for decision-making.

6.1.11   Consideration should be given to the production of a regular newsletter containing information on KPI's for NovaUCD for circulation to stakeholders.

Policy Development and Review

Commendations

6.2.3   The expertise of the existing NOVA team together with its experience and local knowledge will be valuable as new policies are developed.

Recommendations

6.2.4   Staff meetings should be the primary vehicle for keeping NovaUCD abreast of changes in policy and direction.

6.2.5   The knowledge and experience of existing NovaUCD staff should be availed of in the development of new policies.

Communication

Commendations

6.3.4   The brand of NovaUCD is clearly associated with the provision of excellent incubation and entrepreneur support activities.

Recommendations

6.3.5   A survey of UCD Schools' opinion, involving a range of engagement methodologies of NovaUCD services (including focus groups) would be useful.

6.3.6   There should be more proactive marketing of the range of NovaUCD services within UCD.

6.3.7   NovaUCD are strongly encouraged to hold most of their events within School/College facilities and to use their relationships with Business Development Managers to ensure this happens.

6.3.8   NovaUCD needs a presence/link on the University main web page and its own website should be revamped to make it more user-friendly.

APPENDIX 1

Response of NovaUCD to the Review Group Report

The Office of the Vice-President for Innovation welcomes the Quality Review Report published following the visit to NovaUCD in October 2011. The recommendations in the Report will assist the Unit in further enhancing its provision of services to UCD and the wider community.

In particular, we welcome the endorsement given by the Review Group to our activities and the significant commendations contained in the Report.

The Office of the Vice-President for Innovation will be considering how to address each of the recommendations over the next few months with the aim of preparing a Quality Improvement Plan.

Quality Review Visit Timetable

NovaUCD

10-13 October 2011

10 October 2011

17.15-18.45   RG met at hotel to review preliminary issues and to confirm work schedule and assignment of tasks for the following two days.

19.30   Dinner hosted for the RG by the Chair of UCD Academic Council Committee on Quality

Day 1: 11 October 2011
Venue: Board Room NovaUCD

09.00-09.30   Private meeting of Review Group (RG)

09.30 – 10.15   RG meet with VP for Innovation (& Interim Director NovaUCD)

10.15-10.30   Break

10.30 –11.15   RG meet with NovaUCD Management Team

11.15 – 11.30   Tea/coffee break

11.30 – 12.15   RG meet with SAR Co-ordinating Committee

12.15-12.45   Break – RG review key observations

12.45-13.30   Lunch, Room 030, ground floor

13.30 -15.30   RG meet with staff from each of the core areas of NovaUCD (on individual basis for 20 minutes each)

15.30-15.45   RG meet with Technology Transfer staff

15.45-16.45   Tour of Facility

16.45-17.30   RG review key observations
1730   RG Depart

Day 2: 12 October 2011
Venue: Board Room NovaUCD

08.45-09.15   Private meeting of the RG

09.15-09.55   RG meet VP for Innovation (& Interim Director, NovaUCD)

09.55-10.10   Break

10.10-11.00   RG meet with individual Stakeholders –Spin Out Companies and UCD Researchers

11.00-11.15   RG tea/coffee break

11.15-12.15   RG meet individually with Stakeholders – SpinIn Companies

12.15-12.30   Break - RG review key observations

12.30-13.00   Lunch

13.00-14.00   RG meet with external stakeholders

14.00-14.15   RG private meeting - review key observations

14.15-15.00   RG meet with Management Accountant, UCD Bursar's Office and Operations Manager to outline NovaUCD's financial situation

15.00-15.15   RG meet with Research Physics and Innovation Officer, UCD School of Physics

15.15-16.15   RG meet with representatives of UCD Nova Limited

16.15-17.15   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: 13th October 2011
Venue: Seminar Room 1.35 and Seminar Room 0.22 for Exit Presentation, NovaUCD

09.00-09.30   Private meeting of RG

09.30-10.00   RG meet with UCD Vice-President for Research

10.00-10.30   Optional - RG meets with VP for Innovation (& Interim Director, NovaUCD) and/or specified University staff to clarify any outstanding issues or begin preparing draft RG Report

10.30-10.45   Break

10.45-12.30   RG continue preparing draft RG Report

12.30-13.15   Lunch

13.15-14.30   RG finalise first draft of RG Report and feedback commendations/recommendations

14.30-14.45   Break

14.45-15.15   RG meet with VP for Innovation (& Interim Director, NovaUCD) to feedback initial outline commendations and recommendations

15.15-15.45   Exit presentation to all available staff of the unit

16.00   Review Group depart