RCSI University of Medicine and Health Sciences

Peer Review Group Report

Office of Research and Innovation
November 2021

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1 CONTEXT FOR REVIEW

1.1 Introduction

This report presents the findings of a quality review of the Office of Research & Innovation, at the RCSI University of Medicine and Health Sciences, which was undertaken in November 2021.

The Royal College of Surgeons in Ireland (RCSI) was established by Royal Charter in 1784 to set and support professional standards for surgical training and practice in Ireland. RCSI has evolved considerably in the intervening years and is now both a university and a postgraduate training body in surgery and related specialties. This dual role brings many advantages to the institution, not least of which is the ability to offer education and training at all career levels (i.e. undergraduate, postgraduate and professional) in medicine, surgery and related disciplines. In fact, it is the only surgical or medical Royal College in these islands to have university status. RCSI is the largest medical school in Ireland and awards medical degrees in Ireland, Bahrain and Malaysia. RCSI also provides undergraduate degree programmes in Pharmacy and Physiotherapy in Ireland, undergraduate Nursing degree programmes in Bahrain and Masters (taught and by research) and doctoral programmes variously in Ireland, Bahrain, China, Dubai and Malaysia. RCSI became a Recognised College of the National University of Ireland (NUI) in 1978. Following an institutional review commissioned jointly by the Higher Education Authority and the National Qualifications Authority of Ireland, RCSI independent degree awarding powers were activated by ministerial order in 2010, pursuant to the terms of The Royal College of Surgeons in Ireland (Charters Amendment) Act 2003. The Qualifications and Quality Assurance (Education and Training) Act 2012 established RCSI as a Designated Awarding Body. In 2019 RCSI received authorization to use the description 'University' and to style itself accordingly, pursuant to the provisions of the Qualifications and Quality Assurance (Education and Training) Amendment Act 2019.

RCSI is an independent, not-for-profit health sciences institution with charitable status in the Republic of Ireland. The institution operates a primarily self-funding model, with State funding accounting for less than 20% of total income. The model is based on the education of a substantial cohort of international students, alongside Irish/EU students.

1.2 Methodology for Review

1.2.1 Purpose of the Review

The self- assessment exercise is a process by which a Unit reflects on its mission and objectives, and analyses critically the activities it engages in to achieve these objectives. It provides for an evaluation of the Unit's performance of its functions, its services and its administration. In line with the RCSI strategic plan ('Growth and Excellence') it provides assurance to the University of the quality of the units' operations and facilitates a developmental process to effect improvement. The fundamental objectives of the review process are to:

- Monitor the quality of the student experience;
- Identify, encourage and disseminate good practice, and to identify challenges and how to address these;

- Provide an opportunity for Units to test the effectiveness of their systems and procedures for monitoring and enhancing quality and standards;

- Encourage the development and enhancement of these systems, in the context of current and emerging provision;

- Inform the University's strategic planning process;

- Provide an external benchmark on practice;

- 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 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 and the Qualifications and Quality Assurance (Education and Training) Act 2012.

1.2.2 The Review Process

The key stages in the internal review process are:

1. Establishment of a Self-assessment Committee;

2. Preparation of a Self-assessment Report (SAR) and supporting documentation;

3. Site visit by a peer review group that includes external experts, both national and international;

4. Preparation of a peer review group report that is made public;

5. Development of a Quality Improvement Plan (QIP) for implementation of the review report's recommendations (that is also made public);

6. Follow-up to appraise progress against the QIP.

1.2.3 Membership of the Peer Review Group

List the names of each member of the Peer Review Group, Chair first.

- Jane Burns (Chairperson), Director of the Regional University Network, Technological University of the Shannon: Midlands Midwest;

- Jan Andersen (External Content Expert), Senior Executive Officer, University of Southern Denmark;

- Dr Paul Craven (External Content Expert), Head of Research Operations, Imperial College London;

- Dr Rich Ferrie (External Content Expert), Chief Executive Officer, London BioScience Innovation Centre;
- Rachel McCauley (Student Expert Representative), PhD Candidate, Trinity College Dublin;
- Professor Leonie Young (RCSI Internal Expert), Professor, Dept of Surgery, RCSI.

1.2.4 Terms of Reference for the Peer Review Group

The terms of reference of the PRG are to:

- Evaluate critically the SAR and the supporting documentation;
- Verify how well the aims and objectives of the Unit are being fulfilled, having regard to the available resources, and comment on the appropriateness of the Unit's mission, objectives and strategic plan;
- Comment on how well the Unit fits with the strategic plans for the University as a whole;
- Evaluate the Unit's strengths, weaknesses, opportunities and challenges as outlined in the SAR;
- Discuss any perceived strengths and weaknesses not identified in the SAR;
- Assess the suitability of the working environment(s);
- Comment on any recommendations proposed by the Unit in its SAR;
- Make appropriate recommendations for improvement, with due consideration of resource implications;

The Peer Review Group virtually visited RCSI from 22-25 November 2021, and held meetings with:

- Executive Research Management Team (ERMT)
- Principal Investigators (Group 1 and Group 2)
- ORI Pre-Award and Innovation Team
- ORI Post Award, Research Contracts
- ORI Sponsorship Team
- Members of RCSI Senior Management Team (SMT)

- Local Research Support
- Clinical Investigators
- Central Support Services

2 PROGRESS MADE SINCE THE LAST REVIEW

2.1 GENERAL OBSERVATIONS

One of the PRG members was involved in the previous ORI review in 2015, which provides a good perspective to assess the progress made during the last cycle. The overwhelming impression is of very significant progress in all areas. There has clearly been additional investment in the team as well as in new systems and processes, supportive leadership, and a clear strategic aim to support more clinical research. This has been rewarded with widespread appreciation, amongst the academic community, of the value that ORI brings to the research pathway.

The SAR development process appears to have been robust, well-organised and taken seriously by the team. It is an excellent document.

There appears to have been a huge amount of progress in many different areas since 2015. Both the organisation as a whole, and ORI in particular, deserve congratulations for what they have achieved in that timescale.

2.2 COMMENDATIONS

a) A very substantial increase in research volume growth (>70%) appears to have taken place since 2015, going by the data in Table 1 of the SAR. It would be interesting to explore further whether this growth can be clearly linked to the additional ORI resource since the previous review, or whether this trend was already underway and might have happened anyway? If the former, this would be a very positive message to send in terms of the value of an appropriate level of expert and dedicated research support.

b) The expansion of ORI – both in terms of new functions and additional resource – to meet this demand is welcome (11 to 25 FTE between 2015 and present). Similarly, an increase in resource within the Research Finance team, which plays an important supporting role.

c) The separation of the ORI into pre- and post-award teams is sensible and appropriate given the volume of activity and the specialist nature of each. It is very difficult for expertise and specialist skills to develop in these very different areas if the roles and duties of pre- and post- are combined in the same teams.

d) The establishment of a new sponsorship team/function has proven essential to ensure RCSI is able to meet its aim of leading an increasing number of high-quality, investigator-led clinical research studies, including CTIMPs (Clinical Trials of Investigational Medicinal Products). This is a critical and specialist function which protects the organisation from risk and provides assurance to external regulators and patients.

e) The enhanced focus on research contract review is similarly specialist and essential for risk mitigation and quality assurance.

f) Research management tasks are often distributed and devolved throughout an academic organisation, e.g., to investigators and to their departmental support staff. Therefore,

developing and supporting networks of other research support staff across the organisation has been important to avoid ORI carrying the burden alone. Regular communications and clearly delineated responsibilities and accountabilities ensure processes happen smoothly.

g) With additional resource to free up time, the ORI has been able to take a very active role in engaging with new clinical academics and PIs, introducing them to systems and procedures and encouraging them towards specific grant applications. The satellite office in the Beaumont hospital remains a very welcome feature, despite the challenges posed recently by pandemic restrictions. Even through this period, the PI community recognises that ORI has been very flexible and adaptable in being able to support all campuses.

h) Multiple new initiatives for research training and support have been developed, and presumably this has contributed significantly to the growth in research volume over the previous few years. There have been successful communications activities, which have been measurable in terms of their impact in the press (using 'alt-metrics').

i) There have been a number of successful external audits, reviews and accreditations – these are never easy, and the positive outcomes provide additional reassurance that the Office is expert and diligent. These positive reviews should encourage an enhanced reputation for RCSI amongst external research funders – their investments are safe with ORI.

2.3 RECOMMENDATIONS

In general, there are few obvious or identifiable weaknesses or areas of major concern. The PRG has identified a number of areas to explore further, as below, but these should not be taken as fundamental to the ORI providing its core functions. They are more to indicate areas of development to ensure the Office maintains its high performance and continuously improves.

a) The PPI Manager role is valuable in terms of supporting grant applications. The 'patient voice' is becoming an increasingly important perspective in research, and it will be important to ensure this activity is not isolated in the Office or does not become a 'single point of failure' in case of sick leave or vacancy. The PPI Manager needs to link more visibly with, and become integral to, other parts of the ORI, rather than perhaps appearing as an isolated element. This is not to criticise the current PPI service at all, as the current PPI Manager is clearly expert and dedicated to the role, and her support is very much valued by the academic community.

b) From the organogram on p11 of the SAR, the 4 posts in the Sponsorship Team are managed (and sit within) the post-award function of the Office. This is appropriate but it is also worth considering that many of the risks assessed during the sponsorship assessment process are also relevant at pre-award, grant application stage. Also, sponsorship 'in principle' may be required as part of a grant application, i.e. funders often want to know whether the submitting organisation is willing to sponsor a trial. There may be value in the sponsorship function 'reaching through' a little more to pre-award, to indicate to applicants some of the necessary considerations later down the line.

c) Respond to increased clinical activity by having more researchers trained in Good Clinical Practice (GCP) and sufficient available capacity in terms of research delivery staff (nurses), and having systems for 'buy-out' and back-fill of clinical time using grant income. Need to raise awareness on the clinical side via the CRC.

d) There are two main objectives for ORI: a) to support researchers, and b) to support implementation of the organisation's research strategy. Therefore, is the academic/research community also aware of, and fully bought into, the organisational research strategy? It is ORI role to support this strategy so the strategy needs regular communication and wide support. If these two objectives are not always aligned and communicated, then the Office may be in a more difficult position.

e) Consider how interfaces with supporting research administrators (in academic departments) have developed. Are roles clearly separated in terms of accountabilities and responsibilities, and these clear to the academic community? This may indeed be the case already, but it was something that the PRG did not explore in a lot of detail.

f) Adding clinical trial data (metrics) into the RIMS seems an obvious next step, but it is appreciated that it is difficult to build everything into a single system. Other useful clinical research volume metrics (as and when possible) might be;

   i) numbers (and demographics) of patients recruited into RCSI-sponsored clinical research studies,

   ii) number of studies sponsored by RCSI (CTIMPs and non-CTIMPS), and

   iii) number of studies hosted from external sponsors (including commercial sponsors).

g) Commercial sponsors will also want an organisation to be able to set up studies quickly, once contracts are signed and approvals are given, and to deliver the agreed number of patients into studies in the agreed time ("recruitment to time and target"). These will need to be 'joint' aims between RCSI and their partner hospitals, and should be developed as clinical trials activity grows further.

h) Not necessarily a question for ORI alone, but another query would be "how does RCSI measure the quality of its research outputs?". The growth in volume is impressive, and some of that growth can indeed be taken as a proxy for quality, but robust (DORA-compliant) research quality metrics are equally important of course.

3 INTRODUCTION AND CONTEXT OF THE UNIT

3.1 GENERAL OBSERVATIONS

This is a very well structured and ambitious unit. There are appropriate organisational structures in place with experienced representation from each of the key areas, and clear mechanisms in place to ensure oversight of research integrity.

Quantitative and qualitative benchmarking is in place to track delivery of defined KPIs. We may suggest that these KPIs are aligned and compared with national and international metrics and performance, in order to benchmark against 'peer' organisations.

It seems that the ORI Review falls towards the end of the current RCSI 4-year strategic plan (2018-2022) providing an opportunity now for changes that will help in formulating the next strategic plan. Therefore, clarity on what the key strategic goals are for the next four years will be essential.

3.2 COMMENDATIONS

a) The ORI is viewed overwhelmingly by the PI community at RCSI as helpful, flexible and expert. This is an amazing result and the team should rightly be very proud of themselves. All team members are highly praised, proactive and appropriately empowered.

b) The new Research Information Management System (RIMS) has been successfully integrated into the organisation, with an appropriate suite of Standard Operating Procedures (SOPs), which has added efficiency and clarity to processes.

c) Associated corporate support services – such as Finance and HR – have also increased their research-dedicated resource to help meet demand.

d) The ORI continued (and continues) to provide excellent service during the pandemic across the RCSI campuses, including RCSI-Bahrain. and this has been welcomed by researchers. Systems are in place and readily adapted to an online environment, which opened up new opportunities. It was noted how well the ORI managed to maintain research activity during the pandemic, by demonstrating the flexibility of a hybrid working model.

3.3 RECOMMENDATIONS

a) There are still some potential 'pinch-points' in certain processes/functions, and it is now appropriate to consider if the organisation should support further. These include legal/contractual review (need will increase if more complex clinical trials), interface between award being made and award set-up/budget management (see below), and support for PPI.

b) Undertake some exploratory work to understand the difference in perceptions (between PIs and members of ORI / corporate support services) in terms of the time and effort it takes to get a new grant award set-up and initiated (i.e. RIMS to Agresso handover). There is something of a 'disconnect' between the two groups of stakeholders, so worth investigating to clear up.

c) The PRG heard several examples from PI's (meant as compliments, it should be said) of occasions when they had received support from ORI at unexpected times (one example was late on Christmas Eve, or similar). This is clearly not something that should be expected as a matter of course, even though ORI staff themselves feel a sense of obligation to do this. RCSI should perhaps manage any such 'high expectations' from investigators in terms of the level of service and the hours that ORI staff may respond.

d) The thorny issue of protected research time for clinicians who wish to do research is still very 'live', and not within the scope of ORI to solve. RCSI might want to consider adopting a higher profile nationally in this, and take a constructive lead in advocating nationally to make progress in resolving this.

e) In parallel with the above, and in line with the strategic aim to attract and deliver more clinical research, a more detailed and integrated plan could be developed to help the organisation achieve this. There is of course the obstacle of identifying funding for protected consultant time, and if that could be addressed (at least partially) then there would be an opportunity to not only sponsor and lead RCSI's own research studies, but to deliver studies on behalf of external commercial and non-commercial sponsors. As well as benefits to patients in being able to offer the latest treatments and diagnostics, there are demonstrable benefits to the hospitals in having staff being research-active and with an innovative mindset, and a potential revenue stream for re-investment.

f) Sustained investment from RCSI for strategic partnerships, platforms and co-funding opportunities that drive growth.

4 PLANNING, ORGANISATION AND MANAGEMENT

4.1 GENERAL OBSERVATIONS

ORI has a vision that the university will be globally recognised for research that drives impactful scientific breakthroughs, innovations and insights that address key Irish and international health challenges. The university will be a destination-of-choice for talented investigators, researchers, clinicians and students. Finally, RCSI strives to be an indispensable research partner to their affiliated hospitals, industry partners and spin-out companies.

A review of the management of the ORI by the Deputy Vice-Chancellor for Research and Innovation was undertaken in August 2019. Following a series of one-to-one meetings, strengths, gaps and opportunities were identified. The unit was re-structured to enhance the strategic approach to research support and with a greater focus on Key Performance Indicators (KPIs, linked to Times Higher Education rankings), leveraging of industry links, and sponsorship of clinical trial activity.

4.2 COMMENDATIONS

a) Strategic approach to pre-award activities. There is a careful, considerate and flexible attitude by ORI in their support of particular funding calls, and in their encouragement / incentivisation of PIs to apply for certain calls.

b) The team takes a holistic approach to research processes – they understand the research 'life-cycle' from idea to spin-out, which is valuable to have within the same unit.

c) There are excellent new processes in place to support clinical research.

4.3 RECOMMENDATIONS

a) There is a clear near-term need to raise the profile of the ORI during the TTSI4 funding application process.

b) Provide additional clarity to PIs regarding the processes and support provided between ORI and the Finance Department, covering post-award activities (award set-up, budget confirmation and grant initiation).

c) Establish an understanding of the (increased) role of the ORI in preparation for new challenges like Responsible Research and Innovation, Open Science and Sustainable Development Goals.

d) Enhanced engagement with the Research Strategy Committee to progress recommendations.

e) Investigate the potential of clinical trials as a revenue-generating opportunity in Bahrain.

5 FUNCTIONS, ACTIVITIES AND PROCESSES

5.1 GENERAL OBSERVATIONS

The Panel were impressed with the balance that the ORI team had struck between working to standard processes and procedures, and more 'agile' team working across the functional groups. A comprehensive suite of team meetings afforded good focused discussions both between and within functional groups and policy frameworks were in keeping with national guidelines, providing a robust framework for handling issues across the spectrum of ORI's responsibilities.

RIMS provides an effective platform and has been customised appropriately and there is good integration with other management systems such as Agresso, with local on-site support coming in the first instance from RCSI IT. However, it was noted that the IP Management system was rudimentary and the panel felt that the timing was right to upgrade this to an industry-accepted platform (e.g. Inteum, myIP, or similar).

The panel was impressed that the Sponsorship team formally monitored compliance with SOPs whereas the quality of ORIs activities overall is monitored using a survey-based approach.

The Researcher Handbook provides a comprehensive guide to policies and procedures but the Panel considered that a 'slimmed down' companion guide might be a helpful educational piece providing sign-posting for researchers as necessary.

Decision-making seemed well supported with empowerment cascading down the management chain appropriately.

5.2 COMMENDATIONS

a) The seamless and widespread use of systems (such as RIMS and the CRM) is supporting the move towards data-driven decision –making.

b) The Researchers' Handbook is a very valuable and comprehensive resource and extremely professional.

c) Documentation and workflows for the ORI (policies, SOPs) are comprehensive and well-structured.

d) Automation of many processes has allowed the ORI to focus more on 'higher value' tasks.

e) HR (in collaboration with ORI) have made their own instructional tools for new researchers to use RIMS.

5.3 RECOMMENDATIONS

a) Further collaboration between the Library and ORI, in terms of the interaction and linking of metrics, and impact-monitoring application and documentation of societal impact in terms of research income. More cohesive integration of RIMS system with library repository

b) Use the 'Profiles' feature of RIMS to highlight and communicate the impact on society and research collaboration to external stakeholders.

c) Link increased funding/research income to specific outputs, including industry engagement, patents, licencing agreements, spin outs, academic publications and changes in clinical management.

d) Improve PI adherence to the support available to them (i.e. link to Research Handbook).

e) Raise awareness of Researchers Handbook as a comprehensive resource in the research community, and perhaps provide a slimmed down 'light touch' companion guide for new starters with the key information and facts.

f) Articulate communications further between post-award and pre-award planning – are these two functions as 'joined up' as they might be? There are usually long periods of time between an application and an award, so it is understandable how this might be tricky to achieve.

g) Consider a dedicated IP Management System with connectivity to other RCSI IT systems.

h) Improve external communication to 'sign-post' interested companies and potential partners to appropriate groups (e.g. to ORI, Corporate Relationships. Alumni & Development Office) as part of an enhanced and more structured way to collaborate with industry and develop corporate partnerships (more of a 'shop window').

i) Consider the potential of philanthropic investment to provide a starting point (seed funding?) to ring-fence and protect consultant time to undertake clinical research. Such donations would perhaps need to be unrestricted as this is a somewhat 'invisible' use of philanthropic giving.

j) Consider the sharing of project management support.

6 MANAGEMENT OF RESOURCES

6.1 GENERAL OBSERVATIONS

The panel considered that the recent re-organisation of ORI enabled effective management across the unit and there was good lateral teamwork between the various functional groups. ORI's activities are effectively aligned with the RCSI Research Strategy and the over-arching institutional strategic plan. Staff training and development enabled 'broad brush' compliance with institutional needs whilst individuals PDPs (Performance Development Plans) enabled bespoke career development training.

Sugar CRM had been implemented as a result of the last quality review, whereas the on-going need for an IP Management System has already been highlighted elsewhere in this document.

It was noted that the ORI's innovation activities are in-part financed by the TTSI initiative. The Panel felt that the Innovation Advisory Committee is an excellent body and should be used by the team to provide guidance as it stepped out from the Consortium with Trinity and made a single institutional bid for TTSI4 funding.

Further, the innovation team had made great use of EI's Commercialisation Fund and – largely as a result of this – its spin-out activities had been bolstered and the first new companies were emerging. It would be useful to include KPIs across this activity to ensure appropriate focus is maintained in this.

Despite the obvious hard work that had gone into the Researcher Handbook, there was a still a need to make researchers more actively aware of the various research and innovation processes, and the concept of a slimmed-down companion guide might be a useful handout at departmental seminars and research away days.

6.2 COMMENDATIONS

a) Thoughtful and effective use of the Commercialisation Fund as a key strategic enabler of spin-out company creation.

6.3 RECOMMENDATIONS

a) Support and funding access for non-RCSI personnel (i.e. hospital clinical staff) and direct additional targeted funding towards clinical aspects of research.

b) Utilise the Innovation Advisory Committee as a sounding board for the forthcoming TTSI4 application, and consider more frequent meetings to maximise value added.

c) Consider expansion of the Sponsorship team as their capacity may become stretched before the 'big push' for clinical trials. And/or develop systems for prioritising which trials could/should be sponsored.

d) Be more proactive toward PIs especially in terms of career development opportunities – needs to be more visible, although perhaps in partnership with the HR department.

e) Review the current level of post-award resources to ensure adequate coverage and avoid bottle-necks.

f) Commercialisation Fund applications, awards and conversion to spin-out companies should be a new metric for the Innovation Team.

g) Re-instatement and development of ORI onsite in Beaumont is hugely important, and very much welcomed by those on that site.

h) Look at the award set-up processes from grant award and then the 'handover' from ORI to Finance and HR; perhaps have a kick-off meeting for involved parties at the initiation of new projects?

i) RIMS is a helpful tool but can be (or is perceived to be) a bottle-neck at the handover point to Finance. Refinement through end user testing needed. More communication to PIs about timelines within RIMS system.

j) Provide clearer definitions of the roles that ORI play in terms of General Data Protection Regulations (GDPR), ethical review for clinical research, etc. PIs would welcome this, as well as an understanding of their own responsibilities in such areas.

k) Make researchers more actively aware of the research process, pathways and support infrastructure to include direct communication from ORI about timeliness of grant registration to RIMS system.

7 SERVICE USERS AND FEEDBACK

7.1 GENERAL OBSERVATIONS

In their summation of service users' response and feedback to the Panel, the ORI were highly comprehensive and transparent within the SAR. While the tangible progress made for and with service users since the last ORI review was accounted for in the SAR, the report was unable to capture the outpouring of praise for the Office that was given to the Panel by the service users. The SAR outlines the many different types of potential service users, all at different stages of research careers and expertise. It was deemed by a range of different types of service users that the ORI offer comprehensive support and training to all that strive towards high quality research in RCSI, regardless of career stage. The feedback given by these service users described the accessible, expert, and prompt support that is offered by the ORI.

Firstly, a recurring theme of meetings with service users was the seamlessness of the support given by the ORI. Service users are able to channel their requests for support through the ORI who then contact the various other teams within RCSI and beyond (e.g. Finance, HR) in order to fulfil the user request as efficiently as possible, removing the burden of being passed 'from pillar to post' from the researcher. This alleviates time constraints for researchers, particularly clinicians, who reported that they would simply be unable to make the time to complete much of the administrative work that the ORI takes on for them. This undoubtedly leads to more projects being able to progress, and the bolstering of relationships with individual clinicians, as well as the clinical site they are representing. The support activities that clinicians reported were of most value to them included notification of application dates for potentially suitable grants, support for inclusion of specific information in grant applications (such as PowerPoint slides), and administration support. Many of these users described examples of instances in which they were particularly supported or team members who were particularly supportive, becoming their "go-to" person in the Office.

Support given to external sites and campuses, particularly the onsite presence to support research in the Beaumont and in Bahrain, is extremely flexible and comprehensive. Many innovative solutions have been put in place to overcome the barriers that arise with an overseas campus, including out-of-hours service if needed and scheduled meeting times. In addition to these solutions, the knowledge base that has been developed by the ORI team in relation to IP policies in Bahrain is particularly outstanding. Bahrain representatives commended the seamless support given despite time zone differences, distance, and differences in IP landscapes.

In addition to this support for PIs, early career researchers are also very well supported by the ORI. The training and workshops offered to all users of the service at any level of their research career are well used and highly praised. Mock interviews in particular were highlighted as an example of exemplary and innovative support, that have delivered tangible results. Grant application workshops are also clearly well attended, the results of which can be seen by the success in securing funding by new research staff, e.g. Marie Curie/IRC funding. It appears that gaps in researcher knowledge and skills are identified and attended to quickly, with training developed where needed.

The StAR MD and PhD programmes were praised by internal and external researchers and clinicians alike. The support and structure of these programmes, in addition to producing well-trained

researchers, is mutually beneficial for RCSI and their partnering hospitals who may benefit by recruiting from this well-trained pool. These programmes are deemed to be one of the standout successes of the last five years.

With regards to the ORI's innovation role, there was unanimous praise for the clarity and support given to researchers by the ORI in terms of the structured pipelines from research project to small company spin-outs and commercial opportunities. The ORI identified the need to increase the number of spin-outs that arise from research undertaken within RCSI but have already prioritised this as a point of further development and emphasis as they work towards the next review.

An additional commendation – which was understated by the ORI in the SAR – was the huge degree of support that the ORI have offered to students, particularly during the pandemic. Examples of this support includes the high level of care given to PhD students from Suzhou in China, in assisting them to return to Ireland and be able to work remotely with supplied laptops, the meticulous care taken by Estates regarding lab and workspace safety so that student and staff work could continue, and the socially distant continuation of education in Croke Park. Unlike most other institutions, RCSI had very limited cessation of activity anywhere for service users throughout the pandemic.

Very few limitations were described by users of the ORI's services. All users involved in the appraisal were broadly very satisfied with the Office's functionality. However, improvement can always be made in strengthening relationships with clinical sites in order to gain more open channels for research. This would include the return of a physical presence of ORI staff at Beaumont Hospital when viable, which was highly valued by Beaumont research partners.

In addition, in order to increase the performance of spin-outs, the ORI should continue its' development of the structured approach to collaborating with industry including spin-out companies. Overall, however, as echoed by the significant improvements of the satisfaction levels as captured by the Research Support Survey circulated by the Quality Enhancement Office in May 2021, the ORI have been highly praised by their service users, and have quickly become an intrinsic part of the successful research processes within RCSI.

7.2 COMMENDATIONS

a) Positive seamless user experience for researchers using the ORI including onward links with Finance, HR and other support teams.

b) Consistent praise for the degree of support for innovation the ORI provides – clear and structured pipeline for spin-out companies.

c) Evidence of a huge degree of commitment to students, particularly during the pandemic. Tangible evidence of this commitment. Limited cessation of activity anywhere for service users throughout the pandemic.

d) Excellent training given to all users of the service at any level.

e) Impressive range and depth of support provided to clinicians by the ORI. Praise for the all-encompassing service that the ORI provides.

f) StAR MD and PhD programmes mutually beneficial for RCSI and partnering hospitals - support and structure of these programmes as provided by the ORI producing well-trained researchers.

g) The Bahrain campus is extremely well-supported by ORI despite the logistical challenges. The knowledge base that has been developed by the ORI team in relation to national IP policies in Bahrain is particularly outstanding.

h) Healthy tension and clear responsibilities between SFI Centres and ORI.

i) Clear understanding of the need to manage 'state aid' issues in company engagement.

7.3 RECOMMENDATIONS

a) Review the potential for a more structured way to collaborate with industry to bolster pre-existing relationships with clinical sites.

8 ONGOING QUALITY ENHANCEMENT

8.1 GENERAL OBSERVATIONS

From a quality perspective it is very positive that there has been a creation of a network of research support for personnel through RCSI at levels of the research cycle. This ensures consistent understanding of the overall process, where each function has impact and also where delays in responding or progressing steps can cause serious delays. It is noted that all partners in the research 'ecosystem' that support researchers are actively involved such as Finance, HR, the Library and Communications.

The establishment of a Laboratory Management Team is good Quality Assurance practice. This quality initiative helps to maintain and evaluate laboratory standards which are vital for scientific medical rigour and lab integrity. This management team can Identify any challenges or, areas of concern. This ensures the laboratory practices are also externally auditable. There are processes and records of the maintenance of equipment, active control and monitoring of chemicals/solutions.

Another significant quality standard employed by the ORI is installation and development of the Research Information Management System (RIMS). This ensures proper reporting, monitoring and auditing of the funding process. The integration of the RIMS with HR and Finance systems provides an excellent overview of the entire Research management process.

The additional component of the researcher profile of the RIMS standardises the way researcher and their research outputs are displayed and monitored. These consistent formats and file types allow for further verification of research and impact metrics as well as serving as a valuable information resource for internal and external collaborators and funding bodies.

8.2 COMMENDATIONS

a) Very good understanding of integration of metrics and impacts.

b) The creation of a network of research support personnel throughout RCSI is a very positive approach to standardise access to resources in the research eco-system.

c) The establishment of a Laboratory Management Team is good QA practice and maintains lab standards, which is vital for scientific medical rigor.

d) Preparedness and engagement of stakeholders in this review demonstrates an understanding and acceptance of quality review.

e) Staff training in research has been developed to a high level.

f) Implementation and Adherence to the European Code of Conduct for Research Integrity https://allea.org/code-of-conduct/ is commendable.

8.3 RECOMMENDATIONS

a) Identify solutions to complement RIMS in the management of clinical trial data and processes, reviewing solutions that can work in collaboration with CRC.

b) Develop Quality Cycles for all systems and practices.

9 SUMMARY OF COMMENDATIONS AND RECOMMENDATIONS

9.1 GENERAL OBSERVATIONS

The Panel would like to thank all the staff at RCSI involved in this review, including the members of the ORI team and those from other parts of the organisation who contributed their time to discussion, answered our questions and provided valuable feedback.

The level of positive and constructive engagement from clinical academics and other corporate support services was a pleasure to hear and indicative of their overall perception of the ORI team, based on their experiences and interactions. It is rare indeed to hear such consistently positive comments about a central corporate support office from academia! RCSI and ORI have achieved something quite outstanding, in terms of the journey they have been on over the past 5 years. We hope our commendations and recommendations – summarised below – are reflective of this.

Whilst acknowledging and celebrating the positives, the current ORI team and the wider leadership at RCSI should take the opportunity of the forthcoming new RCSI strategic planning cycle to build further, to consolidate and invest further where appropriate on the back of that, and to take leadership roles nationally and internationally where possible to further develop their research programmes and the support structures behind them.

The following is a summary of the main findings and themes of the review. For subsequent Quality Improvement Planning (QIP), we suggest that the specific recommendations outlined in the previous sections should be followed.

9.2 SUMMARY OF COMMENDATIONS

a) The current structure of the ORI feels appropriate for both the existing scale of activity and breadth of responsibilities. Expert and diligent sub-team leaders, each given the required support and priority by the RCSI ERMT, understand their own areas and work effectively across sub-team boundaries. Regular and effective communications between teams means that siloes have been avoided and coherent working is achieved.

b) The expansion and new investment in a sponsorship sub-team and a PPI manager is critical to enable RCSI to grow its own experimental and later-phase clinical trials activity. Whether grant-funded or industry-funded, RCSI investigator-led interventional clinical trials will be an important indicator of academic esteem and expertise.

c) The ORI approach and its priorities are consistent with the overarching institutional strategy – the two work effectively 'hand in hand'. In particular, the pre-award function sensitively guides academics towards funding opportunities in line with strategy, but is careful not to be too 'pushy' in this.

d) The Innovation Advisory Committee is a strong support to the Innovation team. Effective use has been of the Commercialisation Fund as a key strategic enabler of spin-out company creation. There is a clear and structured pipeline for the various different routes to commercialisation and – although the ultimate outcomes in this area can take some time and

cannot be guaranteed – the fruits of this labour are being realised, for example in the form of new company spin-outs.

e) A strong, open and holistic collaborative culture exists between ORI and other corporate support functions (Finance, HR) and with research managers/administrators embedded within academic departments. Again, this helps to have an effective, distributed research support system across the entire research pathway.

f) A number of successfully-implemented and well-used support systems (in particular the RIMS, CRM) are effective in enabling streamlined workflow and in measuring activity and performance. The systems have a solid foundation in clear and effective policies and standard operating procedures.

g) Support for academic training and development – particularly for new appointments, students and early career researchers – is outstanding via the StAR programme and other similar initiatives. The Researchers' Handbook is a valuable reference.

h) Support from the ORI to other sites – including the Beaumont Hospital and the campus in Bahrain – has been excellent, despite the difficulties caused by the pandemic.

i) There is a widespread acknowledgement in the ORI of the need for continuous improvement and quality assurance, as evidenced not least by the effort put into this review. External audits and inspections have provided validation of these approaches.

9.3 RECOMMENDATIONS

a) Growth in research activity over the previous 5-year review cycle has been impressive and investment in the ORI functions and related corporate services has – in the main – matched this. However, the levels of resourcing should be reviewed on a regular basis to ensure further growth can be sustainably supported. There are a couple of functions where vacancies or extended leave for current post-holders would leave a lack of cover, and could lead to 'bottle-necks' in the research pathway. In particular, the contracts/legal review function could easily become overwhelmed, and the PPI manager is a single post.

b) Possibly the only current process weakness (or perception of weakness) identified by the Panel was around the interface between ORI pre-award and the Finance department, in terms of moving a successful research grant post-award from the RIMS to the finance system. There was a divergence of views between the corporate support teams and the academics about how difficult/time-consuming this was. Suggest a deeper dive into this process 'handover', stakeholder discussions with a range of early career and more established researchers, and focused communications to try and clarify this.

c) The ORI's innovation activities are in-part financed by the TTSI initiative, currently within a partnership with Trinity College Dublin. The Panel felt that the Innovation Advisory Committee is an excellent body and should be used by the team to provide guidance as it steps out from the Trinity consortium and makes a single institutional bid for TTSI4 funding. There may be

scope in the ORI to now develop more targeted entrepreneurship training which is perhaps more bespoke for specific research disciplines or career stages.

d) The stated objective of RCSI to grow its clinical research activity is pertinent and reasonable, although there are challenges to achieving this which are not entirely within RCSI's control. In particular, it is difficult (given current national healthcare systems) to release time from clinical consultant schedules to design and deliver clinical research studies. Such studies can vary in complexity and the surrounding regulatory frameworks and process stages require dedicated time and expertise (ethics, sponsorship, clinical trials / human tissue / data protection regulations), not only for the clinicians involved but for the supporting corporate infrastructure. RCSI could perhaps take a national lead in the conversation regarding how best to fund/'buy out' clinical consultant time for research, as well as looking to identify internal funds to 'pump prime' this activity.

e) It may be helpful to develop a separate, more detailed clinical research growth strategy with an associated implementation plan (objectives, timescales, metrics). The expertise and experience within the Clinical Research Centre will be crucial to this. A successful strategy will involve the right mix of RCSI-sponsored and led studies, commercially-sponsored studies and other grant-funded, externally-sponsored studies. Industry collaboration and partnerships will be critical in this strategy, and this could be a source of revenue generation for RCSI which could be channelled back into clinical research to support growth.

f) As well as consultant time, effective clinical research requires wider staff training (e.g. in GCP), a cohort of research delivery staff (nurses, midwives, practitioners) across a range of specialties, and support from other facilities and infrastructure within the healthcare system (imaging, pathology, pharmacy, devices/engineering, informatics). All of these elements need to work together to be able to provide a seamless system to provide commercial and non-commercial sponsors with fast study set-up, good quality data, patient safety, and recruitment of participants "to time and target".

g) Data-driven studies (those looking to exploit large clinical datasets for patient and commercial benefit, and to transform healthcare) are another potential strategic opportunity for the immediate future. This would require secure informatics infrastructure, clear data protection policies, and assurances to patients and the public around the use that their data is being put to.

h) The RIMS system should be evolved (or a parallel system developed) to register and report on clinical research activity and the appropriate metrics. Development of such systems, support services, and operations is increasingly going to require a joint approach across organisations (i.e. across the University and its partner hospitals). Building on the local ORI presence at the Beaumont Hospital would be an appropriate place to begin, perhaps then rolling out other 'satellite' ORI offices in other partner organisations. Should the ORI have a more regional, multi-partner focus?

i) Consider extending the support provided by ORI to early career researchers. This is a very attractive service to those looking to build a career in clinical academia, and the benefits of early training and guidance (e.g. retention, grant income) are clear.

j) The ORI support provided to academics to identify funding and collaborative research opportunities is excellent and well-regarded. Consider expanding this 'added value' function.

APPENDIX 1: SITE VISIT SCHEDULE

IN ADVANCE | Week before virtual site visit

Date	Time	Dur. Mins	Mtg. No.	Mtg. Title
Wednesday 17 November (TBC)	09.00 – 09.45	45 mins	1	**Welcome and Introduction for PRG; Housekeeping and guidance for virtual review** Director of Quality & Quality Reviews Manager
	09.45 – 10.00	15 mins	2	Break
	10.00 – 11.30	90 mins	3	**Private Planning Meeting for PRG** Allow 10 minute break during meeting

WEEK OF VIRTUAL SITE VISIT | Day 1| Monday 22 November 2021

Date	Time	Dur. Mins	Mtg. No.	Mtg. Title
Monday 22 November	08.45 – 09.15	30 mins	4	PRG: Review of preparatory work
	09.15 – 10.45	90 mins	5	**Meeting with Executive Research Management Team (ERMT)** **Meeting Theme:** Management, vision, challenges, and strategic directions
	10.45 – 11.15	30 mins	6	Break for PRG
Monday 22 November	11.15 – 12.35	80 mins	7	**Meeting with ORI Pre-Award and Innovation Team** **Meeting Theme:** Integrations of research support activities among teams and with other research support services; support challenges and opportunities.
	12.35 – 13.20	45 mins	8	Break for PRG
Monday 22 November	13.20 – 14.40	80 mins	9	**Meeting with ORI Post Award, Research Contracts and Sponsorship Team** **Meeting Theme:** Integrations of research support activities among teams and with other research support services; support challenges and opportunities.
20 minute break between meetings				
Monday 22 November	15.00 – 16.00	60 mins	10	**Meeting with members of RCSI Senior Management Team (SMT) Meeting Theme:** Role played by the ORI in the implementation of the Institutional strategy and University ranking performance
	16.00 – 16.30	30 mins	11	**PRG Review of afternoon's meetings; draft commendations & recommendations; planning for next day**

WEEK OF VIRTUAL SITE VISIT | Day 2 | Tuesday 23 November 2021

Date	Time	Dur. Mins	Mtg. No.	Mtg. Title
Tuesday 23 November	09.00 – 09.30	30 mins	12	PRG: Review of preparatory work
	09.30 – 10.15	45 mins	13	**Meeting with Principal Investigators (Group 1)** Meeting Theme: ORI support in the planning and implementation of research strategic initiatives (e.g. RCSI-led research centers and network programmes). Relevance and efficacy of RCSI research and innovation policy and procedures. Alignment of ORI support strategy with postgraduate research training strategy
15 minute break between meetings				
Tuesday 23 November	10.30 – 11.15	45 mins	14	**Meeting with Principal Investigators (Group 2)** **Meeting Theme:** Access to ORI supports (different teams), support gaps, areas of improvement
	11.15 – 11.45	30 mins	15	Break for PRG
Tuesday 23 November	11.45 – 12.30	45 mins	16	**Meeting with local research support** **Meeting Theme:** Role of ORI support on local support activities
	12.30 – 13.30	60 mins	17	Break for PRG
Tuesday 23 November	13.30 – 14.15	45 mins	18	**Meeting with Clinical Investigators** **Meeting Theme:** ORI support, Integration of ORI support with the support of other research support services (Finance and HR), research support systems (RIMS)
	14.15 – 14.45	30 mins	19	**PRG Review of afternoon's meetings; draft commendations & recommendations; planning for next day**

WEEK OF VIRTUAL SITE VISIT | Day 3 | Wednesday 24 November 2021

Date	Time	Dur. Mins	Mtg. No.	Mtg. Title
Wednesday 24 November	09.00 – 09.30	30 mins	20	PRG: Review of preparatory work
	09.30 – 10.15	45 mins	21	**Meeting with Central Support Services** Meeting Theme: Integration of ORI with other central support services; research support systems (RIMS, Agresso) Relevant SAR Sections:
				45 minute break between meetings
	11.00 – 12.00	60 mins	25	**PRG meeting to draft commendations and recommendations.**

WEEK OF VIRTUAL SITE VISIT | Day 4 | Thursday 25 November 2021

Date	Time	Dur. Mins	Mtg. No.	Mtg. Title
Thursday 25 November	09.00 – 11.00	120 mins	26	**PRG meeting to finalise commendations and recommendations.**
	11.00 – 11.30	30 mins	27	Break for PRG
Thursday 25 November	11.30 – 12.00	30 mins	28	**PRG meeting with QEO for clarification and discussion of main findings**
	12.00 – 12.30	30 mins	29	**Meeting with Head of Unit & QEO to present main findings**
	12.40 – 13.00	20 mins	30	**Closing presentation to all Unit staff**
	13.00			**Review Ends**

RCSI Leading the world to better health

Internal Quality Review

Quality Improvement Plan (QIP)

27th May 2022

Office of Research and Innovation

Quality Improvement Plan

Office of Research and Innovation

8th July 2022

DOCUMENT CONTROL SHEET

Name of Unit	Office of Research and Innovation					
Project Title	Internal Quality Review					
Document Title	Quality Improvement Plan (QIP)					
This Document Comprises	DCS	TOC	Text	List of Tables	List of Figures	No. of Appendices

Rev	Status	Author(s)	Reviewed By	Approved By	Office of Origin	Issue Date
1	Draft V1	ORI	ORI, QEO	ORI	ORI	11 Jul. 22
1	Final	ORI	ORI, QEO, SMT	ORI, SMT	ORI	26 Sep. 22

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Quality Improvement Plan 27th May 2022

#	Recommendation in order of priority	SAR Reference PRGR reference	Response / Action Planned	Responsibility for Action	Resources Implications	Deadline / timeframe	Measurement / Benchmarking	Outcome / Status
1	Integrate PPI Manager Role within ORI	SAR 2 2.3a	Develop and implement a plan for integration	PPI Manager / PPI Ignite Lead	None	Commenced and ongoing.	PPI involvement at pre and post award ORI activities. PPI manager and PPI Ignite Lead will report into ERMT regularly during the year	
2	Integrate Sponsorship team oversight at Pre-award and consider expansion of team	SAR 2 2.3b SAR 6 6.3c	Integration plan is already in place and works well	Sponsorship Team	N/A	N/A	N/A	
3	Promote and Raise awareness of Clinical Research Centre (CRC) supports	SAR 2 2.3c	(1) Develop a new website including resources and support available, procedures, requirements (2) Develop a clinical research handbook for clinical research staff (3) provide regular updates on CRC activities and support available in the PI form	Director of CRC/ Associate Director of Research	Research Institute funding has been set aside for this purpose	Q1 2023	Website and a handbook	

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Quality Improvement Plan 27th May 2022

#	Recommendation in order of priority	SAR Reference PRGR reference	Response / Action Planned	Responsibility for Action	Resources Implications	Deadline / timeframe	Measurement / Benchmarking	Outcome / Status
4	Regular communication of the RCSI Research Strategy deliverables to the Research Community	SAR 2 2.3d	Provide research strategy updates at Research Strategy Committee, PI forum and WorkVivo	Deputy Vice Chancellor for Research and Innovation	None	Q4 2022	6 monthly research strategy updates at the PI Forum	
5	Clarify role of research administrators within Academic Departments	SAR 2 2.3e	Engage with academic departments to clarify understanding gaps and provide clarifications	Associate Director of Research	None	Q4 2022	Completion for engagement plan	
6	Management system for the capture and tracking of Clinical Metrics	SAR 2 2.3f, 2.3g SAR 8 8.3a SAR 9 9.3g, 9.3h	In collaboration with Insights and Planning Office (IPO) review system for capturing and tracking clinical research metrics	Associate Director of Research & Head of Insights and Planning	None	Q1 2023	Upgraded system for capturing clinical research metrics	
7	Consider how RCSI measures the quality of its research outputs with robust (DORA-compliant) research quality metrics	SAR 2 2.3h	In collaboration with IPO, review system for capturing and tracking the quality and impact of RCSI's research outputs. Provide training to Researchers on producing DORA-compliant CVs	Deputy Vice Chancellor for Research and Innovation, Associate Librarian for Education, Research and Clinical Support,	None	Q2 2023	Researcher workshops and guidance documentation on DORA-compliant CVs completed	

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Quality Improvement Plan 27th May 2022

#	Recommendation in order of priority	SAR Reference PRGR reference	Response / Action Planned	Responsibility for Action	Resources Implications	Deadline / timeframe	Measurement / Benchmarking	Outcome / Status
				Head of Strategic Research Initiatives and Industry Partnerships & Head of Insights and Planning				
8	Clarification for researchers on the processes, supports, timelines and bottlenecks involved between the time funding is awarded to grant set-up	SAR 3 3.3a,3.3b, 3.3c SAR 4 4.3b SAR 5 5.3e SAR 6 6.3h, 6.3i, 6.3k SAR 9 9.3b	(1a) engage with researchers (in particular clinicians) to identify bottlenecks (1b) review processes and system (RIMS) to identify bottlenecks (2) if appropriate, revise process/system to address issues (3) engage with researchers to classify changes implemented and manage expectations	Post Award Research Officer	None	Q2 2023	Reviewed/revised processes and system	

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Quality Improvement Plan 27th May 2022

#	Recommendation in order of priority	SAR Reference PRGR reference	Response / Action Planned	Responsibility for Action	Resources Implications	Deadline / timeframe	Measurement / Benchmarking	Outcome / Status
9	System for buy-out and back-fill of clinical time Consider adopting a national profile in advocating for research protected time for clinicians	SAR 2 2.3c SAR 3 3.3d, 3.3e	Support clinicians in applying for funding including own salary support Support and promote RCSI clinicians to participate in ICAT programme. RCSI session for all new Beaumont consultants and engagement with new consultants to make them aware of research supports available.	Deputy Vice Chancellor for Research and Innovation, Head of Strategic Research Initiatives and Industry Partnerships, Director of CRC & Deputy Director of Clinical Research	None	Ongoing	Increased number of clinicians with dedicated time for research	
10	Sustained Research Investment by RCSI	SAR 3 3.3f	(1) identify and prioritise areas of investment via business planning exercise (2) sustain investments through seed funding programme (3) engage with Development Office to identify donors and charities to support research	Deputy Vice Chancellor for Research and Innovation	To be determined	Ongoing	Increased funding for research	
11	Raise ORI profile during EI TTSI4 funding application process	SAR 4 4.3a	A comprehensive plan has been prepared in conjunction with RCSI	Head of Innovation	This will be done by comms	Commenced, will align with KTBoost	Communications will track engagement	

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Quality Improvement Plan 27th May 2022

#	Recommendation in order of priority	SAR Reference PRGR reference	Response / Action Planned	Responsibility for Action	Resources Implications	Deadline / timeframe	Measurement / Benchmarking	Outcome / Status
		SAR 6 6.3b SAR 9 9.3c	Comms. This includes a review and update of the website. Targeted social media posts on spin-out companies, publishing of impact stories and planned comms around industry engagement.		and the innovation team	review timeframe once known	with post and improvements in website traffic	
12	Establish an understanding of the (increased) role of the ORI in preparation for new challenges like Responsible Research and Innovation, Open Science and Sustainable Development Goals.	SAR 4 4.3c	Appoint "Subject Matter Experts" within pre-award team who are responsible for advising researchers on non-scientific aspects of grant applications, including topics such as Open Science and SDGs, at Grant Application Stage. Provide information seminar and workshop series for Researchers on how to interpret and incorporate topics such as Open Science and SDGs at Grant Application Stage.	Head of Strategic Research Initiatives and Industry Partnerships	None	Commenced - Ongoing	Workshops delivered and attendance at same	
13	Enhanced engagement with the Research Strategy Committee to progress recommendations.	SAR 4 4.3d	Update RSC on progress biannually	Deputy Vice Chancellor for Research and Innovation	None	Ongoing	NA	

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Quality Improvement Plan 27th May 2022

#	Recommendation in order of priority	SAR Reference PRGR reference	Response / Action Planned	Responsibility for Action	Resources Implications	Deadline / timeframe	Measurement / Benchmarking	Outcome / Status
14	Investigate the potential of clinical trials as a revenue-generating opportunity in Bahrain.	SAR 4 4.3d	Continue to support Bahrain in the development of its clinical research infrastructure	Associate Director of Research & Head of Strategic Research Initiatives and Industry Partnerships	None	Ongoing	Increased revenue for clinical trials	
15	Further collaboration between the Library and ORI, in terms of the interaction and linking of metrics, and impact-monitoring application and documentation of societal impact in terms of research income. More cohesive integration of RIMS system with library repository	SAR 5 5.3a, 5.3b	In collaboration with IPO and Library, review system for capturing and tracking the quality and impact of RCSI's research outputs.	Head of Strategic Research Initiatives and Industry Partnerships	None	Q2 2023	Improved metrics	
16	Link increased funding to outputs including industry engagement, patents, licencing agreements, spin outs, academic publications and changes in clinical management.	SAR 5 5.3c	Continue to benchmark our industry engagement, patents, licencing agreements, spin outs, academic publications against growth in our research income.	Head of Strategic Research Initiatives and Industry Partnerships & Head of Innovation	None	Commenced – Ongoing	Similar or increased industry engagement, patents, licencing agreements, spin outs, academic publications activity when normalised for € of research income	

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#	Recommendation in order of priority	SAR Reference PRGR reference	Response / Action Planned	Responsibility for Action	Resources Implications	Deadline / timeframe	Measurement / Benchmarking	Outcome / Status
			Continue to benchmark our publication output against growth in our research income	Head of Insights and Planning & Deputy Vice Chancellor for Research and Innovation	None	Commenced - Ongoing		
17	Improve PI adherence to the support available to them (i.e. link to Research Handbook). Raise awareness of Researchers Handbook as a comprehensive resource in the research community, and perhaps provide a slimmed down 'light touch' companion guide for new starters with the key information and facts.	SAR 5 5.3d, 5.3e	Develop a short version of the researcher handbook and review information on the staff portal and provide update via PI Forum	Post Award Research Officer	None	Q2 2023	- Light touch handbook - Revised structure and content of the research section of staff portal	
18	Articulate communications further between post-award and pre-award planning – are these two functions as 'joined up' as they might be?	SAR 5 5.3f	Review communication between pre-award and post-award activities to identify areas of improvement and weekly meetings between Pre-Award and Post Award Leads	Associate Director of Research & Head of Strategic Research Initiatives and	None	Ongoing	Reviewed/enhanced communication between of pre and post award activities	

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Quality Improvement Plan 27th May 2022

#	Recommendation in order of priority	SAR Reference PRGR reference	Response / Action Planned	Responsibility for Action	Resources Implications	Deadline / timeframe	Measurement / Benchmarking	Outcome / Status
				Industry Partnerships				
19	Consider a dedicated IP Management System with connectivity to other RCSI IT systems.	SAR 5 5.3g	We have augmented the functionality of the Innovation CRM to incorporate IP management and reporting capability. This will be reviewed and if necessary additional systems will be considered	Head of Innovation	To be performed by the Innovation Team	Commenced, to be completed by year end	Ability of CRM to support patent management	
20	Develop collaborations with Industry and development of Corporate Partnerships	SAR 5 5.3, 5.3h, 5.3i	Continue regular monthly meeting between RCSI ORI's Head of Industry Partnerships and RCSI Development Head of Corporate Partnerships. Continue to build on the positive relationship between RCSI ORI's Head of Industry Partnerships and RCSI Development Head of Corporate Partnerships to repeat success to date in attached funding from 3M.	Head of Strategic Research Initiatives and Industry Partnerships	None	Commenced - Ongoing	Number of funded programmes supported by RCSI Development and ORI	
1	Consider the sharing of project management support.	SAR 5 5.3j	Funding for PM support will be included in grant applications.	Associate Director of Research	None	Ongoing	Subject to external funding, shared project management support	

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Quality Improvement Plan 27th May 2022

#	Recommendation in order of priority	SAR Reference PRGR reference	Response / Action Planned	Responsibility for Action	Resources Implications	Deadline / timeframe	Measurement / Benchmarking	Outcome / Status
22	Support and funding access for non-RCSI personnel (i.e. hospital clinical staff) and direct additional targeted funding towards clinical aspects of research.	SAR 6 6.3a	(1) Support the establishment of the RCSI Translational Research Institute, including the enhancement of support and infrastructure, which will enhance engagement between hospital and university. Non-RCSI clinical staff will be offered honorary appointments if they wish to avail of RCSI supports (2) Continue targeted seed funding programme for Clinician Scientists	Deputy Vice Chancellor for Research and Innovation & Deputy Director of Clinical Research	None	Ongoing	Increased number of and funding for Clinical researchers	
23	Be more proactive toward PIs especially in terms of career development opportunities – needs to be more visible, although perhaps in partnership with the HR department.	SAR 6 6.3d SAR 9 9.3i, 9.3j	(1) In consultation with researchers review Career Development Framework content and uptake, (2) communicate further career development opportunities	HR Business Partner	None	Q2 2023	Increased participation in CDF	
24	Consider level of resources	SAR 6 6.3e SAR 9 9.3a	Monitor level of resources at ORI and Research Institute level	Deputy Vice Chancellor for Research and Innovation	To be determined	Ongoing	Continued growth of RCSI research metrics	
25	Record Commercialisation Fund metrics	SAR 6 6.3f	This is already underway and is a new metric for KTB so will be formalised in our external reporting	Head of Innovation	None	By commencement of KTB programme	Will be performed by KTI	

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26	Onsite presence in Beaumont	SAR 6 6.3g	Continue to deliver onsite presence in Beaumont	Associate Director of Research & Head of Strategic Research Initiatives and Industry Partnerships	None	Ongoing	Researchers/Clinicians feeling more supported onsite	
27	Communicate policies around GDPR and research	SAR 6 6.3j	Disseminate Data Protection Guide for Health Researchers In collaboration with Legal Counsel. Develop and implement a training plan	Associate Director of Research & Legal Counsel	None	Q3 2022	Researchers feeling more knowledgeable in Data Protection reflected in researchers' feedback and correct completion of DPIA	
28	Review the potential for a more structured way to collaborate with industry to bolster pre-existing relationships with clinical sites.	SAR 7 7.3a	Deploy CRM to track industry collaborations involving clinicians across our affiliated clinical sites Engage with top five CROs to develop more efficient ways to activate clinical trials in our clinical sites.	Head of Strategic Research Initiatives and Industry Partnerships	None	Q2 2023	Increase in number of clinician-led industry funded projects.	

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Quality Improvement Plan 27th May 2022

#	Recommendation in order of priority	SAR Reference PRGR reference	Response / Action Planned	Responsibility for Action	Resources Implications	Deadline / timeframe	Measurement / Benchmarking	Outcome / Status
			Continue to network with clinicians and their existing industry collaborator to develop repeat business engagements.					
29	Develop Quality Cycles for all systems and practices	SAR 8 8.3b	Develop a plan and implement biannual quality control reviews across all ORI functions	All	To be determined	Ongoing	Quality review report and, over time, improved quality standards	