Chapter 5.41

Research Management and Administration in Qatar

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Abstract

This chapter describes the research ecosystem’s development in Qatar from 2006 until the present day, a brief history of this development, and future development plans. The information provided is a snapshot of the entire research administration enterprise in the country and estimates the current number of employed research management and administration (RMAs). It also presents the challenges and the pivotal role of the RMAs can play in achieving the country’s strategic objective, which could increase the number and the professionalisation of RMAs in Qatar. Some recommendations highlighted here include specialising RMAs in the field of the human subject and animal research protection, research compliance, intellectual property, and commercialisation.

Keywords: Qatar; QRDI; QNRF; RMAs; Research Office; CRA; CIP
Research Ecosystem

The history of Qatar’s research ecosystem development started with the country’s leadership vision back in the years 2000–2003.\(^1\) At the time, the leadership administration assessed the value of Research and Development (R&D) in contributing to a knowledge-based economy. The administration at the time identified a need to transform Qatar not only to be independent of resources such as oil and gas but to have additional means in order to continue the path of progression for the country (Qatar Research, Development and Innovation (QRDI) Council, 2020).

Over the past five decades, the country’s economic ascent has led to a fundamental transformation from a traditional pre-oil society, with an economy based on pearl diving, to a modern and wealthy cosmopolitan nation, with a unique multinational demographic composition, social institutions, and a modern educational system. More specifically, since the 1940s, Qatar has gone through a series of milestone changes during the 1970s and 1980s, recently leading to a clear emphasis on the need to transition to a knowledge-based society, as is outlined in the Qatar National Vision 2030. A conference in 2006, under the patronage of Sheikha Moza Bint Nasser Al Misnad, the wife of Sheikh Hamad bin Khalifa Al Thani,\(^2\) resulted in recommendations to establish research institutes in areas of priority to the country and set up an entity that would provide the means for conducting research, namely funding. This resulted in what is now the Qatar National Research Fund (QNRF\(^3\)), the sole national research funding agency. The development of the research ecosystem in Qatar has gone through three phases. The first phase started in 2006 and was characterised by country capacity building. The agency provided seed funds for undergraduate students to have a hands-on learning experience with a faculty mentor. At the time, there was no infrastructure for R&D, and there was no human capacity to conduct research, governance, or policies to govern research at large.

The first five years, 2006–2011 (also known as phase one), were dedicated to creating a research culture inside Qatar, including creating related policies and procedures, attaining visibility, building local capacity and capability, and raising awareness about the importance of research in society. Phase one included the establishment of two major grant programs in 2006, the National Priorities Research Program (NPRP) and the Undergraduate Research Experience Program (UREP)\(^4\) (Greenfield et al., 2008).

The second phase started in 2011, and at the beginning of 2012, the government examined the country’s priorities. The different pillars and areas of focus identified in this extensive domain of science became known as the Qatar National Research Strategy (QNRS),\(^5\) an initiative launched in 2012 to promote excellence and innovation in research to achieve the country’s broader vision for economic, human, social, and environmental development. As a result, the funding portfolio changed to cater to

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\(^1\) Qatar’s political structure consists of a semi-constitutional monarchy with the Emir as the leader of the country. The Emir appoints a Prime Minister as the head of government as well as the cabinet, the chief executive body of Qatar.

\(^2\) Sheikha Moza Bint Nasser Al Misnad is the consort of Hamad bin Khalifa Al-Thani, the ruling Emir of Qatar from 1995 to 2013. She has aided in the country’s health care and education reforms. Notably, she co-founded the Qatar Foundation for Education, Science, and Community Development in 1995 and continues to chair the organisation to this day.

\(^3\) https://www.qnrf.org/en-us/

\(^4\) https://en.wikipedia.org/wiki/Qatar_National_Research_Fund

\(^5\) https://www.qnrf.org/en-us/About-Us/QNRS
those areas, primarily mission-driven calls, without dismissing the capacity-building aspect that the country still required.

Six years later, in 2018 (Phase 3), the QRDI Council\textsuperscript{6} was established with the first mandate to develop a national R&D strategy. With the RDI ecosystem focusing on engagement and collaborations among key stakeholders, the Qatar Research, Development and Innovation Strategy 2030 (QRDI 2030) now marks a transformational strategy for a dynamic and combined national RDI ecosystem in the next decade. It addresses energy, health, resource sustainability, society, and digital technology as key national priorities for Qatar’s transition to a knowledge economy. QNRF remains the sole national funding agency in the country.

Current RMA Community in Qatar

Since its launch, the QNRF has been establishing the necessary guides and policies to register Research Offices (ROs) of the submitting institutions inside Qatar. A related QNRF strategy was launching its first program, the UREP, to build undergraduate student capacity, which aligns with the QNRS. Qatar University (QU), the only government-funded university in the country; and Virginia Commonwealth University, the first international branch campus to be established in Education City were among the first applicants to apply to these programs.

QNRF discovered that there needed to be rules set for some institutions to follow in the management of research funds. Therefore, the agency established a funding management agreement and required all institutions receiving funds to adhere to these requirements. This meant that the need for dedicated research officers was critical. The authorised RO representative is the person who ensures compliance, vets proposals, and manages the post-award process of the proposals.

American branch institutions like VCUarts Qatar, Cornell School of Medicine-Qatar, Texas A&M-Qatar, Georgetown University, Northwestern University, and Carnegie Mellon University in Qatar are coming with their legacy from the United States. These universities built their research administration structure based on existing structures and know-how established by their home campuses. However, local institutions like QU and the Community College of Qatar have not had a research support office and so have had to build up their research administration offices, including systems structures and policies by adopting the dominant American models and through training in order to comply with QNRF’s requirements. This reliance on borrowing North American models has led to a more limited homegrown research culture, though there have been informal discussions about adapting to the local context.\textsuperscript{7} For these institutions and other national higher institutions to develop, contribute, and sustain a research culture in Qatar and the region, an effective, culturally contextualised and localised system that promotes research undertaking is required. The value of a research culture developed and embedded within the local environment lies in its ability to promote and implement contextualised evidence-based policies and practices. This may include research priorities that are of immediate relevance to Qatar’s needs, including issues related to health, pollution, national capacity building, cyber security, and education, for instance.

In the absence of such a culture, institutions need more relevant resources to make pertinent research-related decisions and policy interventions.

\textsuperscript{6}https://qrdi.org.qa/en-us/

\textsuperscript{7}This information is derived from anecdotal evidence.
Current Number of Institutions Supported by QNRF in Qatar

QNRF has provided support to around 400 entities, either as collaborative institutions or submitting institutions. Currently, QNRF has 32 approved ROs in Qatar, which come from different institution types (academic, public, private, and other [QF, NGOs, and private for public]) (Fig. 5.41.1) (QNRF, 2022).

It should be noted that only institutions inside Qatar with approved ROs are eligible to apply for QNRF funding and submit proposals. This means that only Qatar-based institutions can submit proposals for research funding, while other institutions outside Qatar are still able to collaborate with them. This enables research capacity to be built within Qatar and ensures that findings remain within the country.

Most organisations applying for funding from the QNRF are academic and consequently have the highest number of research administrators. QU, Community College of Qatar, the University of Doha for Science and Technology (formerly known as College of the North Atlantic – Qatar), and Hamad Bin Khalifa University account for 57% of these programs.

Among the post-secondary institutions in Qatar, 10 are public organisations with 206 academic programs, 5 military centres with 19 academic programs, and eight Qatar Foundation-affiliated institutions with 69 academic programs. The university student population is 1.54% of the total number of residents in Qatar.

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8 https://www.qnrf.org/en-us/Collaboration/Approved-Research-Offices
9 https://www.qnrf.org/en-us/Programs-Policy/RO-Registration-Policy
10 https://mis.qgrants.org/Public/AwardSearch.aspx
The Training/Outreach Venues That QNRF Offers to ROs and Other Researchers

The RO staff\textsuperscript{13} at the respective schools and universities meet on occasion to discuss specific topics surrounding the QNRF’s programs, mainly new funding requirements issued by the agency. QNRF does offer outreach and training venues for all the Research Officers registered with QNRF, through various mediums, including webinars, structured workshops, training for new Research Officers, and periodic meetings to discuss RO performance.

QNRF has initiatives to actively encourage commitment to QNRF policies in all phases of sponsored projects, support research production, and honour excelling researchers with distinguished, merit-based awards.

The QNRF-specific Online Performance Monitoring System (OPMS)\textsuperscript{14} measures the performance of both the Research Officers and Investigators. The OPMS utilises a point-based scoring measurement for researchers. This scale measures how closely ROs act in accordance with reporting deadlines, and the RO screening processes produce specific research-based results, among many more. The points are collected on OPMS and are constantly updated. The OPMS indicators can be found on the main page of the QNRF Online Submission System.\textsuperscript{15} Performance scores can be found on the QNRF Online Submission System progress reporting and QNRF Research Outcome Centre.\textsuperscript{16}

For research investigators, OPMS performance will affect funding and resumption of ongoing research projects. Moreover, the OPMS performance will also impact the investigators’ eligibility for ‘renewal’ and ‘continued’ applications.

In terms of ROs, the final cumulative scores are determined by the total ‘active’ projects that are going on in a specific award year. This is done to be sure that all ROs are evaluated fairly as per their annual performance and given recognitions accordingly. All ROs then receive their total score points during ROs periodic meetings.

The aim of the Best Research Office Award is to encourage RO excellence in meeting deadlines and following rules and regulations in all pre- and post-funding stages. QNRF acknowledges the best RO based on the above-indicated RO performance monitoring system during the QNRF forums.

In Qatar, there are no professional associations for RMAs. Some research officers are members of SRAI and/or NCURA and attend their conferences and workshops, but it is determined by individual choice and dependent on their supervisor’s approval. There are currently 9 SRAI members from Qatar, with approximately 53 in the region (specifically Pakistan, UAE, and Saudi Arabia). Meanwhile, there are 6 members from Qatar in NCURA.\textsuperscript{17} As the largest public university in Qatar, QU occasionally invites all RMA staff in Qatar to NCURA’s travelling workshop held at their institution.

\textsuperscript{13}Research Office staff provides administrative support for the research activities and programs. They have a variety of functions such as overseeing proposal development, pre-award support and post-award management, research operations support, and ensure regulatory compliance.

\textsuperscript{14}https://www.qnrf.org/en-us/Programs-Policy/Performance-Monitoring-System-PMS
\textsuperscript{15}https://oss.qgrants.org/
\textsuperscript{16}https://www.qnrf.org/en-us/Programs-Policy/Performance-Monitoring-System-PMS
\textsuperscript{17}These numbers are directly from SRAI and NCURA direct communication via email.
Data

RMAs are in charge of a wide range of duties associated with research activities and project progress. This includes managing project funding, budgets and financial records, organising research materials, and ensuring that project activities adhere to ethical standards and regulations.

Data on ROs for the 32 approved entities in Qatar is not aggregated in numbers, ranking, and status. Four organisations tend to have more than five staff members, whereas the smaller ones have one to two staff members. A search by the author on the QNRF website\(^{18}\) examining awarded institutions has revealed that the types of actively engaged research organisations are private universities (7), which include branch campuses, which are extensions of foreign affiliate institutions established in a geographic location abroad. The home university keeps full autonomy in running the satellite campus. Branch campuses offer a limited number of specialised academic or professional degree programs, as in the case of Qatar’s Education City; medical institutions (2), government institutions (2), for example, the Ministry of Education of Qatar, private organisations (2), non-profit organisation (1), and private universities (2) (Fig. 5.41.1). Following this data, it is estimated that approximately 16 ROs of the 32 registered ROs are actively engaged across the research ecosystem in Qatar (QNRF, 2022).

According to data from a survey\(^{19}\) conducted across 66 countries, only 3 RMAs in Qatar completed the RAAAP survey, all of which were female (Kerridge, Dutta, et al., 2022).\(^{20}\) Compared to the rest of the Gulf region, Qatar has the highest number of RMAs completing the survey, with 1 male RMA in the Kingdom of Saudi Arabia and 1 male RMA in the United Arab Emirates.\(^{21}\) Even then, however, there is little RMA demographic data that can be provided. More broadly, a report by the Planning and Statistics Authority (2020)\(^{22}\) in Qatar identified 5,111 R&D personnel in the country, which includes researchers, technicians, supporting staff, doctoral students, and postdoctoral fellows.

The Case of Qatar University (QU)

QU, one of the oldest and largest universities in Qatar, has the country’s highest number of research centres (17) and research administration staff. The university was established as the first national institution of higher education in the country at the time. Today, it is the largest public university in the country, offering various undergraduate and graduate programs to 19,738 registered students in 2018. Besides the Foundation Program, QU presently comprises ten colleges: The College of Arts and Sciences, the College of Business and Economics, the College of Education, the College of Engineering, the College of Health Sciences, the College of Law, the College of Medicine, the College of Pharmacy, the College of Dental Medicine, and the College of Sharia and Islamic Studies.

\(^{18}\)https://mis.qgrants.org/Public/AwardSearch.aspx

\(^{19}\)RAAAP survey was conducted to understand the demographics of RMA in different countries. https://bit.ly/raaap

\(^{20}\)Given the lack of government data on RMAs in Qatar, it should be noted that the number of personnel cited here is solely a reflection of the minimal available survey data.

\(^{21}\)There is no data provided for the other Gulf countries: Bahrain, Kuwait, and Oman.

Its research pillars and priorities focus on areas of national interest to address the state’s needs for the country’s development.

The Qatar University Research Complex houses six of the university’s research centres. The Complex houses a collection of top-tier national and international scientists working on various topics.

QU’s Office of Research Support functions as a central liaison between faculty and research funding. The Office supports faculty and researchers in planning, developing and submitting research proposals, as well as assisting them in finding funding. The office works with agencies, local industries, national organisations, and global collaborators. In addition, the office overlooks all types of internal grants such as Qatar University Collaborative Grants, Qatar University High Impact Grants, Concept Development Grants, Student Grants, and External Grants. It joins QU departments, including HR, Procurement, and Finance to manage research projects properly. It also ensures strict compliance with rules, regulations, and policies of funding organisations and QU.

The office has 15 staff members with Bachelor’s and Master’s degrees. The office director is a male faculty member with a PhD in Computer Science. In terms of gender, there are 3 male and 12 female research administrators. Out of the 15 staff members, 10 are Qatari citizens: 9 are female and 1 is male. This is consistent with other ROs, both locally and internationally, where females mainly undertake research administrator roles (Kerridge & Scott, 2018a).

Overall, QU is the largest organisation, employing 15 research administrators. The smallest organisation tends to have one to three staff members in their ROs. They have diverse academic backgrounds, and, given that Qatar’s population consists mainly of an expatriate community, one finds that most individuals working as RMAs in the country are expatriates except QU, where Qatari citizens are the majority.

Future Directions

The QRDI plans for the future to include establishing governing policies for ethical regulations and compliance, as well as a push for more innovative research that could increase intellectual property outcomes. This will influence the direction of RMAs requiring more specialists in the domains of research administration and award management.

Since 2019 the country has centralised some research compliance standards, such as the Ministry of Public Health’s regulations on protecting human and animal subjects and creating institutional committees in these areas. To ensure that research complies with Qatar’s laws and regulations and to avoid fraud and waste and abuse of public funds, Qatar will need to introduce additional regulations to govern research misconduct, financial disclosure, and effort reporting.

It is estimated that in the country, there are approximately seven or eight Certified IRB Professional (CIP) trained RMAs who oversee the ethical requirement for research with human subjects. With the increasing number of higher education universities and graduate programs in Qatar, the need for more Certified professionals

23 Usually, there are people with PhD leading these offices either in Director or Associate Deans of Research roles. Only a few are CRA certified, and one has a Master’s in Research Administration (from Johns Hopkins University).
25 https://primr.org/cip
becomes evident. Moreover, the need for increased reviews of IRB protocols is also obvious. We already see delays in studies with human subject research caused by a lack of sufficient IRB boards in the country. A requirement to establish an IRB board is to have staff who have a CIP certification. Getting the CIP credential not only promotes ethical conduct of research with human subjects but also validates the knowledge and competency of staff in administering IRB activities.

In addition, as part of the RDI strategy to focus investment in RDI and technology transfer, there is an apparent need for intellectual property and commercialisation expertise. This is an opportunity for RMAs to specialise in this field in order to lead the commercialisation of research outputs. Moreover, there is a challenge for RDI institutions and individuals to build long-term plans for RDI and maintain the continuity of activities as there is no long-term systematic planning mechanism for government funding expressly for RDI activities. Long-term government RDI investment that is sustained could further develop the research ecosystem and enable the achievement of the country’s strategic objective with a resultant increase in the number and professionalisation of RMAs in Qatar. At present, there are no plans to establish a Qatari RMA.

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References


