



جامعة قطر
QATAR UNIVERSITY



White Paper

on enhancing research and
advancing curiosity-driven
learning



PREFACE

A new 5-year research plan was instituted in 2014 for Qatar University (QU); the previous one was for the 2008-2013 period. The university has achieved academic excellence during the past four decades. Through the new research plan, the university intends to strategically broaden its research mission by substantially strengthening its research portfolio. The latter is further necessitated by the fact that QU intends to seamlessly align its mission with the Qatar National Vision (QNV) 2030 and the National Research Strategy to optimally serve Qatar and the region. Moreover, as a national university with considerable breadth of expertise, infrastructure and resources, under the new research paradigm the university aspires to attain leadership role not only in innovation and discovery but also in educating the next generation of indigenous researchers, scholars and educators optimally suited for establishing a knowledge based economy in Qatar.

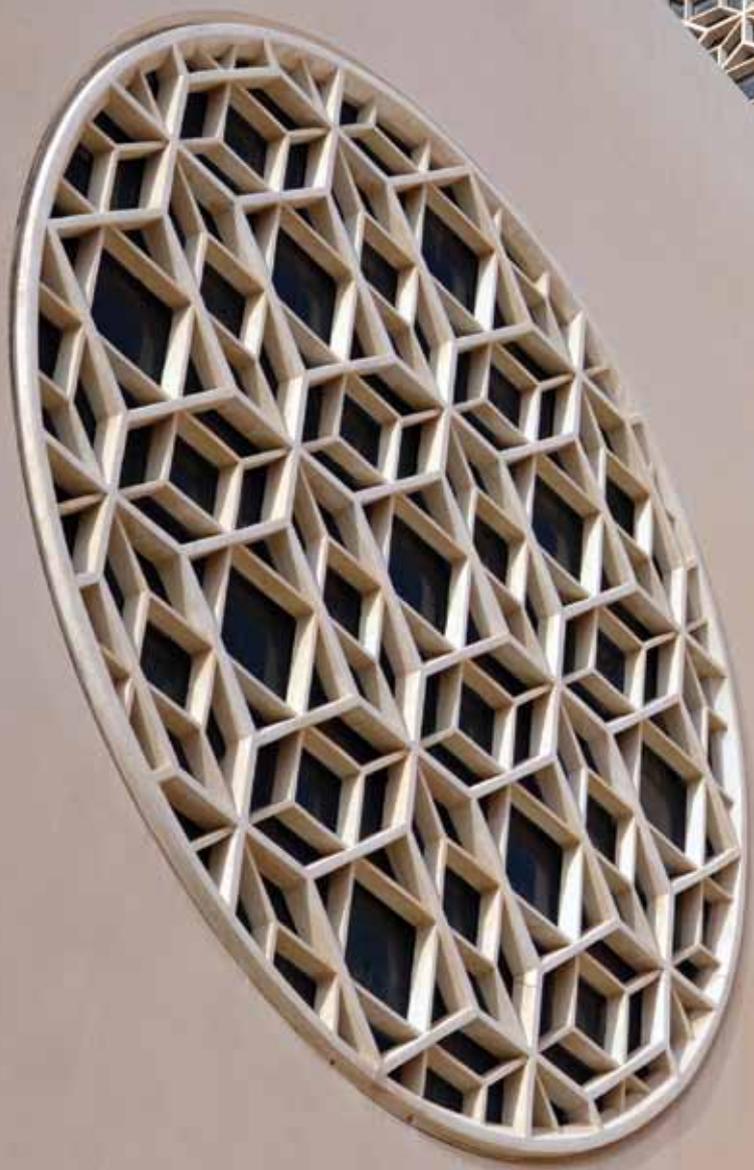
For implementing the new paradigm, the university must embark on a revised framework for research that clearly outlines expectations and code of conduct for all constituents, so that the functioning of the university is accordingly molded to achieve the desired goals. Consequently, broad guiding principles have to be instituted such that there is a clear awareness among all entities/constituents regarding

- the ultimate goal(s),
- modes for achieving the goals, and
- underlying expectations and role(s) each unit or individual has to play in ensuring success.

A WHITE PAPER lays this foundation, serves as a prelude to the development of any strategic plan for research and subsequent implementation of the Roadmap, and directs the university on the newly adopted path by providing broad guidelines for ensuring excellence.

The document is a 'point of reference' for all units within the university for benchmarking research expectations in terms of deliverables and impact; each unit can easily use the guidelines to customize policies for augmenting current research programs or instituting new ones, such that they enhance the overall research profile of the university in close alignment with the new goals. It is a statement of intention by the university to current and future students, trainees and faculty members or researchers, that the new paradigm/standards are an integral component of the way research is/will be and conducted and utilized at QU.

It is a portrayal to all national and global constituents of the university that clear principles/guidelines have been laid for achieving the new research objective(s), a reflective and informed thought process backed by broad engagement/participation led to these objectives, and the benefits of the revised objectives to the younger generation and society (nationally, regionally and globally) is secured. Thus the WHITE PAPER shows that before developing, adopting and implementing a new research strategic plan, the university has thoughtfully devised key guiding principles that ensure university's ascendance towards greater research excellence.





Enhancing Research and Advancing Curiosity-driven Learning

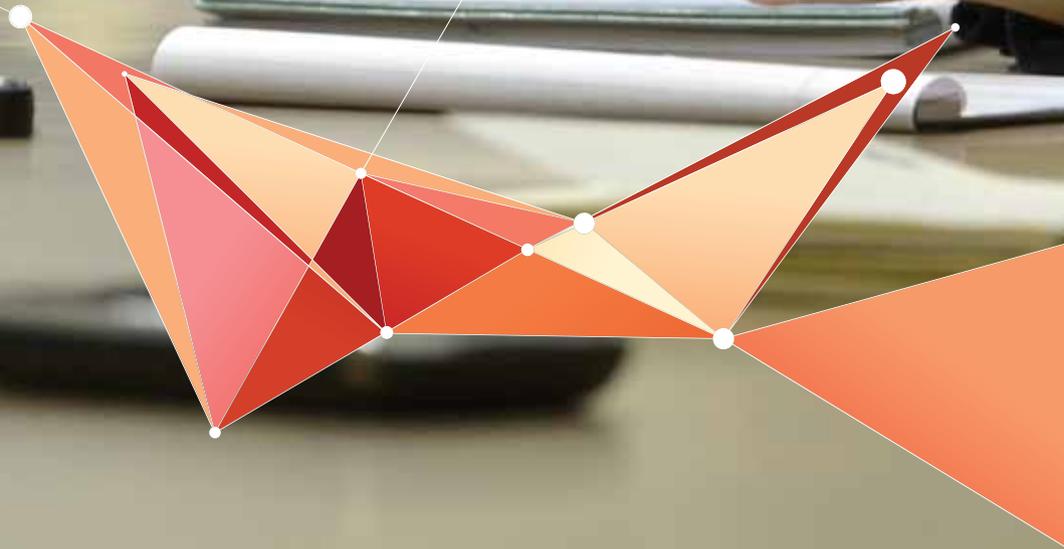
The goal of this White Paper is to optimally position RESEARCH within Qatar University's mission and vision, and integrate it with the unique learning experiences the university offers its various constituents. The university aspires to lead the region as a national academic institution of highest standing committed to providing a comprehensive and creative learning atmosphere for students that is backed by outstanding research expertise and infrastructure dedicated to innovation, discovery and entrepreneurship. The university aims to attain international recognition/visibility by providing regional leadership and world-class expertise in areas significant to the region and the world, and address local challenges. This can only be done by accepting some core principles that ensure fulfillment of QU's renewed research goals, and establishing a functional administrative framework that will facilitate their implementation.

This White Paper is a broad-based recommendation for conducting research that provides a set of principles essential for fulfilling above outlined goals for students, trainees, faculty and the community. Once discussed and accepted in a revised/final format, the White Paper will serve as

- i)** the guiding principle for organizing, facilitating and promoting the research enterprise within the university in relation to various constituents and entities/units including colleges, centers, institutes, etc.,
- ii)** a framework for university's interaction with various bodies within and beyond qatar
- iii)** a foundation and guideline for the new 2014-2019 Research Roadmap and its implementation plan thus steering QU into a new era of advancement.



A
INTRODUCTION



A close-up photograph of a person wearing a black hijab, focused on writing in a notebook with a silver pen. The background is blurred, showing a desk and other papers. The lighting is soft, highlighting the person's hands and the pen.

The changing landscape of education and research in Qatar has been defined amply through various initiatives launched by different entities in the recent past, all of which emphasize the need for the nation to be on the path of a knowledge-based economy. This requires cutting-edge research in areas of key significance to Qatar and the region, and a remarkable level of discovery and entrepreneurship in strategically vital current and emerging spheres that will enable the country to gain regional leadership and global recognition. QU's Strategic Plan 2013-2016 amply stresses the need for research (in particular the KPA2 section) as a key component for sustainability and advancement of the university.

QU is uniquely poised to seize this opportunity for significantly advancing its research portfolio because it

1. is the national university of Qatar
2. has a long-standing tradition of high-quality education and
3. has diverse strengths in research productivity with a multitude of areas represented through various colleges, centers and institutes.

Hence, purposeful development of a robust policy/plan that makes high quality research as one of the key features of QU's framework – one that takes the university on a path of curiosity-driven learning and innovation-oriented research that has societal and economic impact – is essential. A plan with these goals in mind will allow QU to

1. take optimal advantage of funding opportunities available from Qatar Foundation (QF), various local/international funding agencies, stakeholders, collaborators, etc.
2. develop a central scaffold for organizing, supporting, catalyzing individual as well as interdisciplinary research,
3. stimulate increased interaction across various units within the university and increase their interaction with national research centers/agencies,
4. strategically plan growth of, and investment in, research infrastructure and expertise such that it aligns with national research priorities while alleviating the shortage of adequate research infrastructure caused by

the rapid expansion of qu research portfolio, and

5. make research a part of experiential learning among undergraduates, graduates, trainees, faculty and research support staff
6. attract students from Qatar and the region to QU in key Science, Technology, Engineering and Math (STEM) areas by providing an exciting learning environment that emphasizes acquaintance with emerging research methodologies for improved understanding of key elements in basic sciences.

Moreover, the policy will set QU on a path of vertical growth, assure university's regional as well as global recognition in research and teaching. It will also send a clear message to the constituents, stakeholders and the community that QU is advancing to fulfill Qatar National Vision 2030 and is committed to becoming an internationally recognized education and advanced research institution with regional priorities in mind.

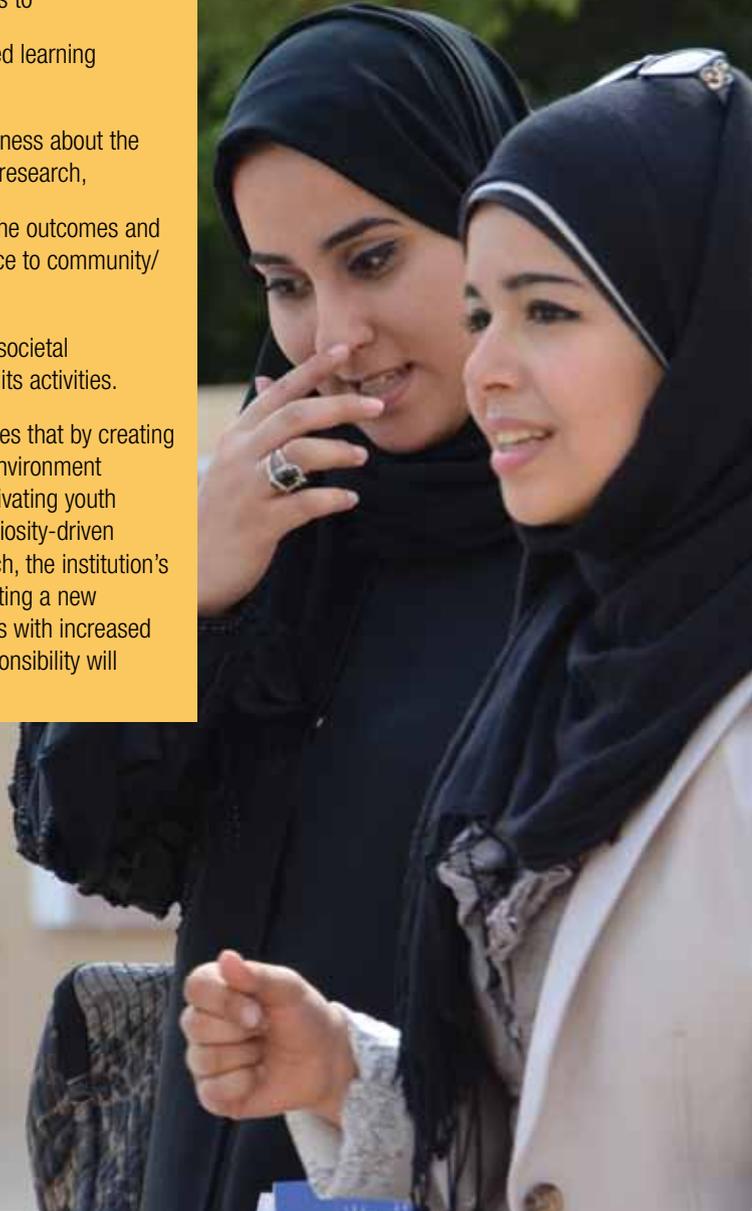
The White Paper mindfully integrates the key elements for promoting research outlined in the KPA2 of the 2013-2016 QU Strategic Plan and further expands on those elements for university's future success.

It is imperative that QU will have to strategically invest in additional faculty/researchers for developing strong "cluster" in areas of strategic research interest. This will require a-priori commitment of substantial funds for recruitment, infrastructure and facilities.

The enhanced research profile of the university will reiterate QU's commitment to the Qatari society/ community and the younger generation. It will clearly portray that the university intends to

1. create enhanced learning possibilities,
2. increase awareness about the significance of research,
3. communicate the outcomes and their significance to community/ region, and
4. attract greater societal participation in its activities.

The university believes that by creating a vibrant research environment geared towards motivating youth to be partners in curiosity-driven learning and research, the institution's commitment to creating a new generation of leaders with increased awareness and responsibility will be fulfilled.





B
ACTIONS





The following paragraphs summarize key short-term and long-term actions that will allow QU to achieve the above outlined goals for advancing and streamlining research and curiosity-driven learning at the university.

Research Administration: Ensuring a highly efficient and functional QU research coordination structure

It is critical to maintain a highly efficient and coordinated central research support and implementation structure (the office of the VPR) that

1. stimulates creativity and research productivity,
2. oversees infrastructure and resource development for optimal use across campus,
3. enables grant proposal development, pre-submission reviews and all pre- and post-proposal submission support,
4. partners with various university units in harmonizing and pursuing overall research growth,
5. associates in the recruitment of research faculty,
6. facilitates interaction within and beyond the university including seeking and providing new national and international research collaboration/sponsorship opportunities to faculty, and
7. serves as an oversight body for advancing the university's research agenda. The activities will require considerable coordination between

VPR's office, Colleges and the QU's Central Administration.

A clearly outlined reporting structure and delineation of duties of various research entities within QU is vital for the smooth functioning of all entities within the research office and in relation to the administrative framework of the university.

Decentralization of responsibilities and macro-management of various research offices/sections, combined with clear accountability and reporting, will help reduce redundancy, create efficiency and increase ownership of progress/decisions. The VPR office will develop a plan together with all entities for such a functional structure by providing an umbrella organization serving all colleges and research units.

A key element of all this would also be increasing expectations for hypothesis-driven, application-based research that is strongly supported by an office of knowledge/technology transfer under the aegis of the VPR office. The latter would be a clear signal to the sponsors and stakeholders about QU's commitment to Intellectual Property (IP) development and its transfer for promoting the vision for knowledge-based economy in Qatar. It will also be a demonstration by QU that economic growth and diversification are key elements of research conducted at QU.

Research priority programs for 2014-2019: launching implementation

Research priority areas for QU for the next five years, and specific themes within each of the four priority areas, were identified

through a highly inclusive process involving faculty, college administration, centers, institutes and allied units. The priority areas, including 12 themes, are in alignment with the national research priorities and the Qatar National Vision 2030. A planned approach (i.e., implementation plan) will be essential to carry out a phased launch of coordinated/ interdisciplinary programs in these priority areas, with due priority initially given to well-conceived and highly competitive proposals involving multiple QU units in strategically important areas.

It has to be recognized that a vigilant eye is also necessary on emerging areas where QU's strengths could be optimized in gaining early leadership. This dynamic process must firmly remain in place at all times so that creativity is encouraged and supported, and new areas pertinent to QU and Qatar are constantly identified. The delivery of White Paper ambitions hinges on streamlining of policy and procedures at various levels within the university, e.g., procurement, recruitment, HR, start-up funds, etc. Prior to onset, various barriers/disincentives will have to be identified, and ways/means to address them will have to be catalogued.

Centers and Institutes: coordination, optimization and cross-pollination

Considering the launch of consolidated university-wide programs in the four priority areas including the twelve themes, it is vital to strengthen current Centers and Institutes. However, this needs to be done in conjunction with their relative utility across the university and their role in advancing the research priorities. Further, since the

programs launched are expected to be interdisciplinary in nature, joint appointments across colleges and centers will add value to research. Optimization and efficient utilization of resources, infrastructure, instrumentation and expertise present in the centers are vital for further enhancement of these specialized facilities.

Hence their utility and productivity need to be carefully evaluated in light of their benefit to the entire university, the significance of their research output, and their cost-effectiveness or return on investment. The performance evaluation criteria must be explicitly benchmarked. Next, if these units have the possibility to generate revenue through services they can provide to community and stakeholder, then they should be strongly encouraged to generate a proportion of their budget through such mechanism(s), provided that such services fall within the core competencies of the unit, have potential to create collaborative synergies and do not affect the conduct of research by the unit or the QU faculty.

Facilities and infrastructure development

Enhancement of the overall research profile of the university will require constant improvement in facilities and infrastructure. Hence, coordinated efforts need to be directed towards:

1. optimal utilization of current infrastructure and resources, reducing redundancies in equipment and labs, and establishing a mechanism for directing the savings thus generated for their up-keep and enhancement.

2. acquiring/creating new infrastructure, resources and technology to match the growing research needs and alleviate the shortage of lab and office space.
3. creating a platform of core laboratories for increased student participation, creativity and learning so that cutting edge research conducted by qu faculty is comprehended by the students through hands-on experiences.
4. maximizing use of state-of-the-art facilities and infrastructure currently being created/deployed through various national efforts and plans (e.g., QF R&D).

Research Portfolio: Increasing extramural research funding

While the level of participation by QU for competitive funding is excellent, greater effort needs to be made for submission of high quality proposals that could match the increasing competition at various agencies. The office of the VPR will engage the faculty in grant proposal writing workshops with adequate follow-ups to ensure submission of focused, streamlined and highly competitive proposals. Other avenues for improving proposal quality, including greater faculty participation, need to be explored and implemented. Broadening the scope of 'research support office' for serving as an effective support mechanism for submission of high-quality grant proposals will augment quality and competitiveness.

One of the goals should be to create a positive and highly supportive environment for proposal submission in disciplines/ colleges that submit relatively fewer

proposals or proposals with less success rate than other colleges. Additionally, targeting and training younger faculty for proposal writing and submission should be a priority.

Research Support: Ensuring efficient support and a cordial research culture

The efficient conduct of research requires a number of support offices including an effective and highly coordinated sponsored programs office, and proficient procurement, finance, HR, and physical facilities (BOD) offices. These offices must be able to work synergistically to provide the most competent support to faculty. The process needs to be streamlined so as to ensure effectiveness and provide optimal support aimed at increasing productivity and providing viable and readily available mechanisms for retention of talented faculty. The support office should strive for achieving the highest level of customer service to faculty.

Further, a recognition system must be introduced to ensure this becomes part of the normal routine of employees in the relevant offices. It is paramount that QU develops mechanisms that are comparable to peers for attracting, hiring, and retaining eminent faculty and also ensuring that they adopt the university as a 'home' and not a 'transition-spot' for the next job.

Sponsorship: Increasing research support from sponsors and stakeholders

A concerted and highly organized reach out effort will significantly benefit QU in attracting increased funding from various



sponsors or stakeholders. A systematized university-wide mechanism for this would add to the current college/center/individual need-based efforts. Hence, it will be in university's long-term interest to establish such a mechanism through a couple of alumni and a development office working closely with the central administration, the VPR office and colleges. Such an establishment, ideally located in the VPR office, will catalogue future research needs and will target appropriate sources for diverse funding ranging from providing support for a program to establishing chairs in individual programs. Clearly, greater emphasis should be given to establishing chairs in university's priority research areas/themes. QU should also consider having a sponsors/stakeholder afternoon to display the research conducted through their support and recognizing their contributions in advancing QU's agenda.

Creating QU-Research Park

One of the eventual goals, both short- and long-term, should be to show presence of industry on campus. A couple of such model-initiatives involving high-profile industrial partners with functional R&D sections on campus will serve as prototypes for attracting other commercial and state agencies to establish a base in QU. Gradual expansion of these activities will eventually lead to the establishment of a "Research Park" that will be a vibrant place for translational/entrepreneurial research, and a fertile ground for faculty and students to participate in high-level application based research. Furthermore, the place will also serve as a base for knowledge transfer to industry, community and students. Such an effort will require careful planning, creation

of incubator space for industrial partners, allocating matching funds for infrastructure and resources and a technology transfer unit. Parallel to this effort, there is a need to boost the capacity and expertise within the intellectual property unit to prepare for increased level of activities in the domains of IP and technology transfer. Such efforts could be coordinated with similar offices at QF, thus avoiding redundancy and creating synergy.

External Partnerships: collaboration with research institutions beyond QU

There is a huge potential for enhancing collaborative research with various National Research Centers, state supported National Laboratories, and several educational institutions within Qatar. While QU can significantly gain from their infrastructure, resources and network, the expertise in the university can be a valuable asset for these institutions. The collaborative and complementary nature of such increased relationship will be extremely beneficial for the faculty, students and trainees of QU as this will provide a research avenue that is hitherto rather underutilized. The VPR office, through expanded activities, can coordinate efforts to engage both sides.

Human Capital: Strategically increasing critical mass of expertise and recognizing productivity

A key requirement for enhancing the research profile of the university will imminently require increasing the critical mass of expertise in the priority areas and identifying funding for their recruitment and start-up. It is essential that the recruitment

be carried out during the early stages of the research plan implementation to ensure that expertise required for successful implementation is available at the front end (not left as an afterthought). Hiring of faculty members within the priority areas must be a university-wide coordinated effort to foster interdisciplinary component and avail the possibility of joint appointment across colleges. While future faculty recruitment must be geared towards identifying candidates with international level research profile, substantial focus must also be on attracting them to Qatar and retaining them. Utilizing home-grown talent to the fullest potential should also be a priority. Next, strategic “Cluster-hire” approach must be adopted in creating research groups in the priority areas/themes, giving due importance to their value for QU, the State of Qatar and its citizens. The approach is time-tested for establishing centers of excellence with diverse yet complementary expertise. The cluster approach also ensures greater productivity and has less chances of failure/collapse of a program if a key figure leaves the group.

Adoption of various mechanisms for incentivizing research is essential particularly during the initial phase of research expansion within an institution. Such incentives show that the university appreciates quality work and is committed to recognizing/supporting those who make an extra effort to bring the university to limelight. Potential incentives include personal rewards, initiatives like seed grants, fund for graduate students and postdocs for the faculty, and other similar support that can spur research. Also, QU can consider a South Korea, Singapore or

Malaysia model wherein leading international faculty are invited to establish programs together with local talent with a 3-4 month time investment each year for at least 3 years till the program is stable and self-sustainable. While developing mechanisms for incentivizing research, considerable care must be taken to have comparable mechanisms for those engaged in intensive teaching such that the significance of the two tracks is recognized and their complementarity is highlighted.

Engagement of Undergraduate Students: Seamless integration of research in undergraduate learning

The largest beneficiaries of research enhancement on-campus must be the student community, in particular the undergraduate (UG) students. Programs aimed at initiating, and subsequently increasing, the participation of this group of students in research (i.e., curiosity driven learning) must be carefully designed and offered. Strengthening/creating undergraduate research tracks aligned to the honors program will be an ideal start for making research as part of UG education. Laying such a foundation and amalgamating UG education with hands-on problem solving experiences will challenge creativity among students and enhance their learning. Lead educational institutes around the world align their UG program with their research program through a network of renowned mentors and role-model researchers. While this approach attracts/enhances talent among the undergraduates, it also creates awareness among the students regarding the research conducted within the institution

and helps portray its value to the society. The approach also channels high-quality students into graduate programs. Ideally, QU must initiate this as a pilot project during the first year of implementation in all colleges with at least 10 and max 20 students engaged in each college (depending on the student population in each college) through a well-planned program jointly conceived by all colleges together with guidance/support from the VPR office and lead from the office of VP & Chief Academic Officer.

Graduate education and postdoctoral training

Research and graduate education are intricately connected and mutually supportive. Growth in research will require careful reorganization of the graduate program in close consultation with various colleges and research units and under the leadership of the office of the VP & Chief Academic Officer. Some considerations worth discussing are: establishing a Graduate School, raising the bar for MSc and PhD, professional high-profile research seminar series, development of graduate students, etc. The goal should be to bring eminence to the graduate program such that it establishes a QU brand name and produces graduates who are readily accepted or sought at an international level. A similar approach also needs to be employed for postdocs within QU so that they receive multidimensional training that exceeds the basic expectation to be competent in research. Similar to graduate students, a university-wide coordinated effort involving all colleges and research units will be critical for achieving this goal for the postdocs.

Assessment, measures of success and accountability

Development and implementation of any research enhancement policy require explicit outlining of measures of success at the front end so that clarity remains regarding expectations from the faculty members. While these measures instill accountability, they also serve as the basis for developing sound assessment methods. For each of the action items outlined in the above paragraphs the following must be developed in close consultation with all constituents:

1. clear guidelines about research prospects,
2. processes for implementation of work-plan for each theme within the 4 areas,
3. potential outcomes within each theme and the priority areas, and
4. methods of evaluation of research progress/success (including assessment metrics).
5. The key to the entire process is active engagement of all parties so that they clearly understand the expectations and their role, and accordingly work towards achieving the renewed QU research goals.

Internal research funding

The paradigm of 'internal funding' for research requires careful and realistic evaluation accompanied by serious introspection. Internal funding must be geared primarily towards research growth, which includes (but not limited to):

1. promoting novel projects,
2. supporting innovative ideas and creativity,
3. stimulating research in underrepresented facets of the university, and
4. maintaining, creating and enhancing resources and infrastructure vital for the research enterprise.

It is reasonable to provide funding for a set period of time for launching new research programs and making available partial internal funding for sustainability of various research programs. However, providing complete support for longer periods (over 2-3 years) generally adversely impacts competitive spirit and inadvertently sets complacency in programs. Hence sustainability of a research program should be linked to healthy growth through extramural grants. The latter serve as a litmus test for the importance and success of a program. An internal debate among top university administrators is essential on this topic for carving out guidelines critical for efficient and effective use of internal funds for supporting and stimulating research.

Research Communication

QU is a flag-ship university of Qatar, and therefore has obligations towards the society, stakeholder and various sponsors and funding agencies. A large part of the research conducted at QU is for the welfare of the local/regional community. The research is oriented towards establishing a knowledge-based economy for Qatar, and delivering products that impact the society.

Conveying this message in a simple and effective manner is critical for QU's image, existence and sustained growth; in fact it is a responsibility QU has towards the society. Hence, a mechanism that enables broadcasting of the QU research message to all constituents needs to be reinvigorated such that the community understands our role and importance, and become our champions in pursuit for excellence.

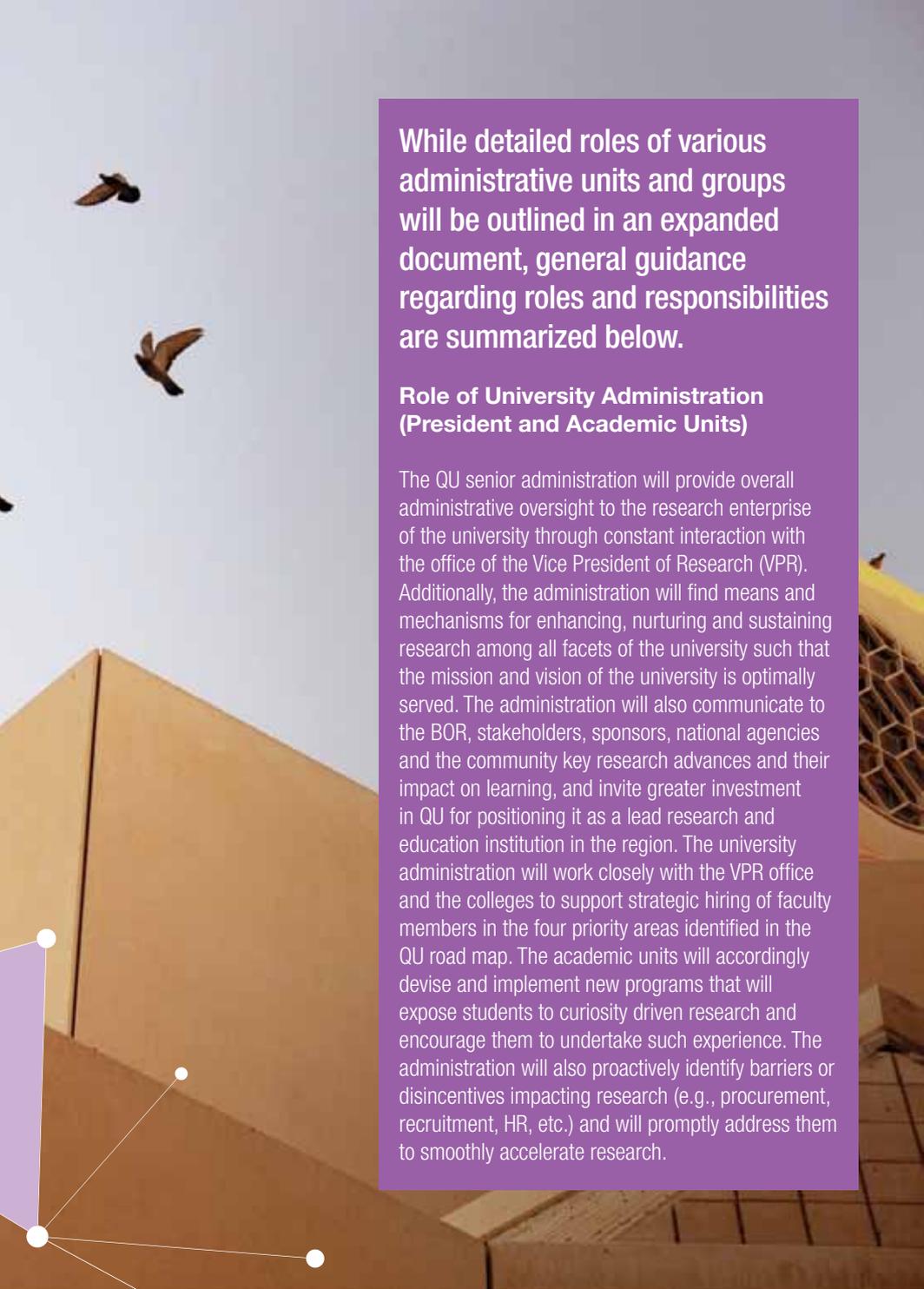
Creating indigenous expertise for future innovation and discovery

As QU embarks on becoming a research-focused university in the near future, it is imperative that it also strives to become the key provider of highly-skilled work force in Qatar and the region. It is imminent that the university develops and maintains an elevated research profile during coming years. The resultant enhanced global visibility and international ranking of the university will expectedly attract local youth to pick QU as their 'first-choice' for getting top-quality innovation and discovery driven research education locally than at institutions in other countries. A significant outcome of this effort will also be increased engagement of the home-grown talent in advancing the local community, industry, education and research enterprises than is presently seen. QU should thus emerge as the primary 'capacity-builder' and source of the future generation of highly proficient experts for various occupations or professions in Qatar and the region, and the key provider of leaders for innovation and discovery from among the local/regional population.



C
**ANTICIPATED
ROLES OF VARIOUS
UNIVERSITY
ENTITIES**





While detailed roles of various administrative units and groups will be outlined in an expanded document, general guidance regarding roles and responsibilities are summarized below.

Role of University Administration (President and Academic Units)

The QU senior administration will provide overall administrative oversight to the research enterprise of the university through constant interaction with the office of the Vice President of Research (VPR). Additionally, the administration will find means and mechanisms for enhancing, nurturing and sustaining research among all facets of the university such that the mission and vision of the university is optimally served. The administration will also communicate to the BOR, stakeholders, sponsors, national agencies and the community key research advances and their impact on learning, and invite greater investment in QU for positioning it as a lead research and education institution in the region. The university administration will work closely with the VPR office and the colleges to support strategic hiring of faculty members in the four priority areas identified in the QU road map. The academic units will accordingly devise and implement new programs that will expose students to curiosity driven research and encourage them to undertake such experience. The administration will also proactively identify barriers or disincentives impacting research (e.g., procurement, recruitment, HR, etc.) and will promptly address them to smoothly accelerate research.

Role of Vice President for Research (VPR)

The VPR will oversee the entire research enterprise at QU and provide the vision and support essential for steering research for education, growth, discovery and entrepreneurship. The VPR will be the chief spokesperson for research at QU and, together with the Associate VPRs, will promote the advancement of various research entities and their integration in the overall learning/training environment. An expanded outline of the role and duties of the VPR office are provided as an appendix at the end of this document.

Role of Individual Colleges

Each of the QU colleges will play a key role in advancing the research agenda for the coming years. While the colleges will invest in individual specialty areas (specific to the college needs), the colleges will make every effort to align their research programs with the four priority areas that contain thirteen themes for future interdisciplinary work. The latter will be foundational for collaborative research across colleges and will be instrumental in attracting larger funding from various sources including QF and industrial partners. The colleges will create a team of role model researchers as mentors for engaging undergraduate students in ongoing research and will create research tracks for undergraduate honors programs. The colleges will work closely with the VPR office to devise innovative/creative learning programs that involve hands-on research experience. These programs will be incrementally introduced creating a vibrant learning environment. Further, each college will strategically hire faculty members in the four priority areas with emphasis on research

portfolio of the candidates and provide mentorship and support to junior faculty.

Role of Centers & Institutes

The centers and institutes will:

1. continue working as units of excellence conducting cutting edge research in their respective areas. each center will increase its visibility by deliverables important to the community and the region.
2. provide a collaborative and a welcoming supportive research environment for faculty members within QU.
3. joint appointment of qu faculty members and vice-versa for center/institute researchers should become a norm; a highly vetted process with clear guidelines/expectations must be established to ensure that joint appointments compliment the niche.
4. serve as the basis for increased extramural funding to qu because the funding agencies recognize that quality research will be conducted at qu due to these specialized units.
5. attract and train undergraduates, graduates and postdoctoral trainees in their areas of specialties.

Role of Faculty and staff

The QU research track faculty and staff will proactively engage in research enhancement activities and increasingly avail the possibilities for initiating research projects in areas of their expertise either independently or collaboratively with other researchers.



The faculty, staff and postdoctoral trainees will work together with the VPR office to avail opportunities for writing and submitting grant proposals for internal as well as extramural competitive funds, and attending proposal writing workshops and mentoring sessions that will enhance their capabilities. The faculty, together with university administration, VPR office, Centers/Institutes will be partners in research oriented learning programs and in disseminating research outcomes within and outside the university community. It is expected that a proportion of the faculty will have teaching as their primary focus. These faculty members (teaching track) will be engaged from time to time with ongoing research projects for potential participation and for dissemination of outcomes to UG students.

Role of students and trainees

The undergraduate (pre-identified group selected through a qualification process to undertake a research track as part of their curriculum) & graduate students and postdoctoral trainees will take the initiative to seek opportunities for research and make every effort to integrate it in their curriculum. They will reach out to faculty members and various research units within the university to find possibilities that can allow them to participate in research, have hands-on training in techniques, and understand the importance of research in bringing about welfare for humans and their environments.



C

**EXPECTED
OUTCOMES**



While specific outcomes for each of the proposed actions outlined in section B will be delineated in a concerted university-wide implementation plan developed jointly by various constituents, the anticipated overarching outcomes are:

1. QU aspires to be the regional leader in research and education. The actions will definitively guide the university in this direction and will enhance its local, regional and global image.
2. Increased research excellence will enhance academic superiority; a vibrant, engaging, curiosity driven learning environment will be gradually created that will benefit students, trainees and faculty members.
3. An increased interaction/collaboration between units within QU and with key institutions within Qatar will (incrementally) allow optimal utilization of our strengths, conduct of high-quality research that will lead to publications in higher impact journals, substantially increased extramural funding, meaningful industrial partnership and a shift towards innovation oriented environment that supports growth of basic as well as applied/ impactful research and spurs entrepreneurship.
4. The university will evolve into a show-case institution in Qatar and a lead institution in the region with clear deliverables to the local community: significantly higher level of education, enhanced research profile, research outcomes that benefit the nation and global communities, and a reinforced academic foundation that will attract global scholars to QU for interaction and collaboration.

Appendix 1:

- The Office of the Vice President for Research is committed to the following high-level roles and responsibilities:
- Promoting the conduct, dissemination, and application of responsible, significant research by faculty, staff, and students.
- Promoting cooperative and productive relationships with academic units and other constituencies on campus that share similar research goals.
- Developing approaches and resources to maintain and enhance the research infrastructure to facilitate high quality research.
- Encouraging the development of interdisciplinary and multi-institutional research projects from within Qatar University.
- Monitoring the proposal review process, negotiating award amounts, and coordinating internal grants and awards processes.
- Communicating with college and center/institute administration and faculty members on issues related to research by maintaining constant dialogue.
- Formulating appropriate policies and procedures necessary to ensure successful implementation of the research vision.
- Ensuring that Qatar University's by-laws are put into effect regarding research funding and standards.
- Assuring the ethical conduct of research and its reporting; overseeing IRB
- Overseeing the office of Biosafety & Compliance which includes IACUC, IBC and other similar bodies.
- Providing consultation concerning the recruitment of faculty members who would contribute to and improve the research activities at Qatar University.



- Communicating significant research issues and concerns that arise to the Vice-President and Chief Academic Officer.
- Overseeing the alignment of Qatar University's research strengths-facilities and human capital-with social needs.
- Building and strengthening ties between the university and its external constituencies, and serving as liaison between society and Qatar University faculty on matters related to research.
- Outreach to potential extra-mural research clients and other research stakeholders in the community.
- Pinpointing technological problems in the business world and private sector that could benefit from applied research services, technical advisory services, and access to Qatar University's technical expertise and facilities.
- Evaluating the effectiveness of the scholarly activity that is taking place at the university and is supported by Office of Research through funding or other services.
- Evaluating the efficacy of the duties and procedures that occur within the Office of Research.
- Providing an efficient pre- and post-award support to faculty.
- Working with other research related support offices to ensure that faculty needs and concerns are addressed.
- Providing support incentives that pull the research faculty to excellence.





