Researchers Exchange and Mobility Program (REMP)

Request for Applications (RFA)

Created: June 2019
## Acronyms and Definitions

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Applicant</td>
<td>Member of the event organizing committee who must be affiliated to an approved submitting institution</td>
</tr>
<tr>
<td>CoI</td>
<td>Conflict of Interest</td>
</tr>
<tr>
<td>QF</td>
<td>Qatar Foundation</td>
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<tr>
<td>REMP</td>
<td>Researchers Exchange and Mobility Program</td>
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<tr>
<td>QNRF</td>
<td>Qatar National Research Fund</td>
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<tr>
<td>QNRS</td>
<td>Qatar National Research Strategy</td>
</tr>
<tr>
<td>RO</td>
<td>Research Office</td>
</tr>
<tr>
<td>SI</td>
<td>Submitting Institution (must be inside Qatar and have an RO registered with QNRF)</td>
</tr>
<tr>
<td>Training</td>
<td>Structured learning session in which instructor presents specific information and techniques</td>
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<tr>
<td>OPMS</td>
<td>Online Penalty Monitoring System</td>
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1. Overview

Qatar National Research Fund’s (QNRF) mission is to advance knowledge and education by supporting original and competitively selected research across all scientific fields, with an emphasis on the following four pillars of the Qatar National Research Strategy (QNRS):

- Energy and Environment
- Computer Science and ICT
- Health
- Social Sciences, Arts and Humanities

To complement its vision of fostering a research culture in Qatar, QNRF has introduced the Researchers Exchange and Mobility Program (REMP). The purpose of this grant is to support graduate students and employees in gaining the knowledge and skills necessary to build research collaborations to spur strong economic growth. REMP also focuses on encouraging graduate students to tackle and overcome the global challenges confronting the sciences. This program will encourage partnerships by providing rewarding experiences to applicants. During the program, applicants will undertake a research experience opportunity abroad.

2. Program Objectives

2.1. Expand Qatar's research culture and increase its research capacity.

2.2. Enhance the creativity and productivity of researchers and academics in Qatar.

2.3. Bridge the gap between academia and the private sector.

2.4. Train the next generation of researchers, with a special emphasis on fulfilling the research focus areas.

2.5. Create a platform for building collaborations between different institutes, both in Qatar and abroad.

2.6. Expose candidates to an international research experience and private sector experience, as well as enhancing R&D employability skills.
2.7. Expose candidates to the culture and mindset of international counterparts and institutions.

3.  Program Description

3.1. QNRF will award applicants who apply for training aligned to the research focus areas (Appendix-II).

3.2. The REMP allows Qatari and eligible residents to fully participate in a research experience by working with international research institutes. Following acceptance, applicants will have the opportunity to work on research projects alongside leading and innovative researchers in the hosting institutes.

3.3. The REMP accommodates both graduate students and employees as follows:

3.3.1. Graduate Students

Training duration can be up to six months and includes one return ticket and a monthly allowance of 3,000 USD.

3.3.2. Employees

Training duration for this track can be up to 12 months and includes one return ticket and a monthly allowance of 3,000 USD.

<table>
<thead>
<tr>
<th></th>
<th>Graduate Student</th>
<th>Employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ticket</td>
<td>One return ticket</td>
<td>One return ticket</td>
</tr>
<tr>
<td>Stipend</td>
<td>3,000 USD</td>
<td>3,000 USD</td>
</tr>
<tr>
<td>Duration</td>
<td>Up to 6 months</td>
<td>Up to 12 months</td>
</tr>
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</table>

3.4. Conferences and short training programs are not supported by REMP.
4. Eligibility Criteria

4.1. Applicants must be enrolled in a graduate academic program or employed in a local research institute/organization with an approved RO.

4.2. Qataris and residents of Qatar (with valid RP) are eligible to apply.

4.3. Employees holding a terminal degree in a specific field with more than two years of experience are not eligible to apply (Ex. Faculty members, Scientists or members on equivalent position).

4.4. The training objectives must be aligned with the research focus areas (see Appendix II).

5. Timeline

5.1. In any given cycle of REMP, applications must be submitted for training/internship requests scheduled to occur at least four months after the submission deadline. This is required in order to give QNRF enough time following the submission deadline to conduct the evaluation process, and sign agreements where awarded.

5.2. The review process for the submitted proposals will take place biannually and will be vetted by the respective institute’s research office (RO), as per the timelines posted on the REMP webpage on the QNRF website.

5.3. Results of QNRF’s evaluation will be communicated to applicants after approximately three months from a given cycle’s submission and RO vetting deadline.

For the upcoming cycle, the timeline will be as follows:

<table>
<thead>
<tr>
<th>REMP Cycle 1</th>
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<tbody>
<tr>
<td>Online submission commencement</td>
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<tr>
<td>Online submission deadline</td>
</tr>
<tr>
<td>RO Vetting commences</td>
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<tr>
<td>RO Vetting deadline</td>
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<tr>
<td>Announcement of results</td>
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</table>
6. **Submission**

6.1. For each cycle of REMP, the online submission channel (https://www.qgrants.org/) is opened for several weeks during the corresponding cycle for the applicants to submit their applications.

6.2. Applicants must login the REMP submission channel to submit all the required information, taking into careful consideration all the guidelines specified for sponsorship requests.

6.3. The application should contain the following:

- Applicant’s CV.
- Employment letter, or university enrollment/transcript; depending on the applicant’s track.
- Letter from host institute showing detailed program including: host name, host location, dates, duration, objectives, and training description.
- Support letter from candidate’s institute mentioning the intended outcome of such experience
- Two signed reference letters dated not more than six months before the date of submission.
- Completed REMP application.

6.4. The proposal will then be automatically forwarded to the SI’s RO for vetting, prior to being received by QNRF.

6.5. All changes to the sponsorship application, either during the pre- or post-award phase (e.g. training date, training duration, etc.), shall be discussed via the REMP-Change Request channel and validated by QNRF before execution.

6.6. QNRF reserves the right to reduce the amount awarded to any selected awardee, or reject any proposal submitted.
7. Evaluation

Every REMP application will be evaluated based on the following criteria:

7.1. Quality of research training and the calibre of the host institute.

7.2. Applicant profile (CV, reference letters, research background, GPA etc).

7.3. Potential of training to strengthen the candidate’s research experience in the field.

7.4. The overall impact of the training on the candidate, the institute, and Qatar itself.

7.5. Alignment with QNRF’s research priorities.

8. Disqualification

QNRF reserve the right to disqualify a sponsorship proposal for any of the following reasons:

8.1. Missing information.

8.2. Uploading incorrect documentation.

8.3. Failure to meet QNRF policies, REMP rules, or other eligibility criteria.

9. Obligations and Duties

9.1. Submitting Institute’s Role

All sponsorship expenses should be expended in compliance with the SI’s policies and procedures. QNRF requires the submission of the final financial statement for items sponsored by QNRF.

9.2. Applicants’ Role

Applicants must upload a summary report within 30 days of the end of training, stating the items mentioned below via QNRF’s special REMP channel. Any delay will affect the final cumulative score and may have a negative impact upon the RO’s best award for the year.
10. Conflict of interest

Applicants are advised to be mindful of any possible conflict of interest by referring to Section III of the QNRF Research Ethics Guide at http://www.qnrf.org/en-us/Funding/Research-Ethics-Guide.

11. Enquiries

For any enquiry about the program and the electronic submission process, please use the QNRF “Support” link at http://support.qnrf.org/index.php?/Tickets/Submit. Applicants can choose the appropriate department and specify the topic of query for further information.

QNRF reserves the right to update/edit this Request for Applications document at any time, including the middle of a cycle while applications for the cycle in question are still being submitted.

12. Appendix – I: REMP Application Template

12.1. Goals and objectives of the proposed training/internship

12.2. How are applicant’s research background and experiences make them suitable for this training?

12.3. How can this grant impact the applicant’s current and future research plans?

12.4. How will the training contribute to capacity building?

12.5. Why is the host institution chosen best suited for this training?

12.6. Outcomes of this training
13. Appendix-II : Research Focus Areas

1. Energy and Environment
   1.1. Oil & Gas in Qatar (exploration, production, and processing)
      1.1.1. Technologies & processes for safe, economical, and environmentally responsible exploration & production of the hydrocarbons
      1.1.2. Technologies related to the processing of oil and gas
      1.1.3. GTL, LNG technologies
      1.1.4. Compression, fractionation, separation, transportation
      1.1.5. Environmental aspect of production and processing of hydrocarbons

   1.2. Solar PV

   1.3. Cooling and Energy Efficiency
      1.3.1. Key driver to reduce costs and CO₂ emissions (Cooling has the lion’s share of the energy sector in the GCC. 67% of electricity generated is consumed by domestic AC)
      1.3.2. Enhancement of cooling efficiency
      1.3.3. Process optimization and industrial heat recovery
      1.3.4. Socio-economic studies

   1.4. Environmental Sustainability
      1.4.1. The Natural Environment: Marine, terrestrial biodiversity, air quality
      1.4.2. The Built Environment: Architecture, Civil engineering, urban planning, mobility, transportation

   1.5. Carbon Capture & Utilization
      1.5.1. CO₂ conversion into environmentally friendly useful products
      1.5.2. CO₂ capture & transportation technologies
      1.5.3. CO₂ Utilization: CO₂ as feedstock and CO₂ chemical and biological conversion

   1.6. Water Production, Storage, Re-use, and Management
      1.6.1. Desalination
      1.6.2. Membrane technologies
      1.6.3. Energy efficiency
      1.6.4. Wastewater treatment reuse, unconventional source of water
      1.6.5. Water quality

   1.7. Advanced Materials for High Added Value Products and Process Industries
      1.7.1. Novel catalyst development, additive manufacturing, and high value polymer products
      1.7.2. Novel technologies solving corrosion
1.7.3. High performance materials, e.g. self-healing materials; biologically inspired solutions for energy industry and environment applications.

1.8. Food Security and Local Food Production
1.8.1. Producing and protecting local agricultural products (plants, animal, and fisheries resources).
1.8.2. Integration of relevant technologies into agricultural production (Artificial Intelligence and Smart Agriculture).
1.8.3. Integrate efficient water use, energy into agri-technology for efficient local food production.
1.8.4. Food safety and genetic enhancement techniques
1.8.5. Strengthening resilience among people and Agrifood systems: Supply Chain, Community Initiative, Policy and Legislation

2. Biomedical and Health Pillar

2.1. Non-Communicable Diseases (NCDs) including Epidemiological Studies, Treatments, Health economics and Policies
2.1.1. Diabetes
2.1.2. Cancer
2.1.3. Cardiovascular diseases, hypertension, Ischemic heart diseases, congenital heart diseases, rheumatic heart disease, and heart failure
2.1.4. Renal diseases: Glomerulonephritis, Kidney Stones, Nephrotic Syndrome, Polycystic Kidney Disease (PKD) and Chronic renal failure

2.2. Reproductive, Maternal and Child Health including Epidemiological Studies, Treatments, Health Economics and Policies
2.2.1. National maternity and perinatal research, neonatal and post neonatal care, high risk pregnancy
2.2.2. Children with cognitive impairment or abnormal neuropsychological development with focus on: Autism, attention deficit hyperactivity disorder (ADHD), Fragile x- syndrome, Rett syndrome
2.2.3. Primary and secondary male and female infertility

2.3. Mental Health Research
2.3.1. Eating disorders and substance abuse
2.3.2. Anxiety disorders, attention deficit/hyperactivity disorder (ADHD/ADD), bipolar disorder, depression
2.3.3. Neurodegenerative diseases mainly Alzheimer’s and dementia
2.4. Communicable Diseases (infectious diseases)
   2.4.1. Human viral diseases and multi-drug resistance (MDR) bacterial diseases,
   2.4.2. Hospital acquired infection and control
   2.4.3. Emerging Infectious Diseases and Recent Outbreaks.

2.5. Precision Medicine
   2.5.1. Immunogenomics and personalized immunotherapeutic approaches
   2.5.2. Clinical implementation of pharmacogenomics
   2.5.3. Multi-omics analysis of cardiovascular diseases
   2.5.4. Precision medicine E-solutions and applications

3. Computer Science and ICT
   3.1. Cybersecurity
      3.1.1. Security of industrial control systems
      3.1.2. Threat intelligence and proactive security
      3.1.3. Cybersecurity framework with state level auditing and compliance requirements

   3.2. Smart Grids
      3.2.1. Automation architectures and advanced metering infrastructure for active distribution systems
      3.2.2. Electrified transportation infrastructure in harsh environment
      3.2.3. Modeling and real-time simulation of power grids and interfacing with ICT platforms.

   3.3. Big Data Analytics & Artificial Intelligence
      3.3.1. To analyze, predict and provide efficient solutions to emerging issues and challenges to enhance efficiency and performance in different sectors, e.g., energy, health, finance, industry, logistics, sports & agriculture
      3.3.2. Efficient algorithms and systems for decision making and performance optimization

3.4. Healthtech
   3.4.1. Digital preventive care
   3.4.2. Telemedicine

3.5. Smart Cities
   3.5.1. Internet of Things
   3.5.2. Intelligent transportation systems

3.6. Next Generation Networks
3.6.1. Spectrum management and resource optimization
3.6.2. Self-organizing networks

3.7. Blockchain and Applications
3.7.1. Blockchain and secured Distributed Ledger Technology (DLT) applied to industry: energy, healthcare, finance, manufacturing, etc.
3.7.2. Blockchain and data privacy

3.8. High Performance Cloud Computing
3.8.1. Secure and reliable cloud computing that ensures confidentiality and privacy of data and information.
3.8.2. High performance computing systems, algorithms and optimized software for:
   - Engineering
   - Life science
   - Weather, climatology, earth science
   - Material science, chemistry, nanoscience
   - Elementary particle physics, plasma physics

4. Social Sciences, Arts and Humanities

4.1. Lifestyle and Quality of Life
   4.1.1. Cyber crime
   4.1.2. Bullying
   4.1.3. Risk youth behavior
   4.1.4. Health lifestyle

4.2. Cultural Identity and the Development of Human Potential
   4.2.1. Gender equality
   4.2.2. Contemporary issues in Islam
   4.2.3. Role of media in society
   4.2.4. Population growth
   4.2.5. Labor and regulation
4.3. Economic Diversification and Sustainability
   4.3.1. Policy and programs for the realization of diversification goals
   4.3.2. Diversification in the economic sectors & ensuring sustainability
   4.3.3. Economy diversification
   4.3.4. SMEs; entrepreneurship; financial technology and business regulations

4.4. Educational Outcomes
   4.4.1. STEM Education
   4.4.2. Teacher development
   4.4.3. Early childhood education

4.5. Population growth and sustainability
   4.5.1. Aging
   4.5.2. Migration
   4.5.3. Population dynamics

4.6. Family Studies
   4.6.1. Family cohesion, marriage and divorce
   4.6.2. Families at risk
   4.6.3. Parenthood: Social policy research related to families

4.7. Gulf and Regional Studies
   4.7.1. Gulf studies
   4.7.2. International relations of the Gulf