
Proposal for Faculty Grant for International Connection**Faculty Member:** *Muhammad T. Suleiman**Assistant Professor**Civil and Environmental Engineering**mts210@lehigh.edu***Date:** *March 4, 2012***Trip Destination:** Qatar University, Qatar**RECEIVED****MAR 06 2012****International Affairs**
Lehigh University**Background Information**

Few years ago, the government of Qatar started the Qatar National Research Fund (QNRF) (<http://www.qnrf.org/>). The mission of the program is to advance knowledge and education by supporting original, competitively-selected research including basic and applied research projects. The QNRF include several programs such as the National Priority Research Program, the Young Scientist Research Experience Program, and the Undergraduate Research Experience Program.

The National Priority Research Program (NPRP) is the flagship program of the QNRF that is targeted to address key national, regional and global needs (http://www.qnrf.org/funding_programs/nprp/). The NPRP is a one-cycle per year grant application of funding ranging from \$20k to \$350k per year. The proposals should address issues important to Qatar's national interest. The NPRP program focuses on collaboration between researchers in Qatar and their international colleagues. The program focuses on multi-investigator, multi-year research projects. The program requires that at least 65% of the budget must be expended in Qatar. Therefore, understanding the national interests of Qatar and the capabilities, limitation and research culture at Qatar University (the main State University in Qatar) as well as understanding the interests of their faculty is important to make best use of such an opportunity.

Goal of the Trip

The goal of the PI is to pave the way for future collaboration between Lehigh and Qatar University focusing on QNRF opportunities. The target of this proposal (i.e., the first visit) is to understand the national interests of Qatar and the capabilities, limitation and research culture at Qatar University as well as discussing mutual interests with faculty members at Qatar University.

Activities to Date

The PI of this proposal has been searching for information related to Qatar University and faculty and their research interests. I mainly focused on faculty members that have research interest and experience related to my research experience or research ideas that I have. So far, I identified three faculty members in Mechanical Engineering, Civil Engineering and Biological Sciences that I could collaborate with. I started the contact with Dr. Mohammed J. Al-Khawajah, Associate Professor of Mechanical Engineering at Qatar University. Dr. Al-khawajah has research experience in heat exchangers, gas turbines, and thermal insulations,

and worked at the National Oil Distribution Company (a Qatar refinery) as the head of the rotary equipment department for about 10 years. I contacted Dr. Al-khawajah to introduce myself and my research interests and to indicate my interest in research collaboration. After exchanging few e-mails and learning more about the research interests of each other, Dr. Al-Khawajah welcomed the proposed visit to Qatar University.

Expected Outcomes

Short-term

During this first visit, I envision meeting with several faculty, discussing potential research collaboration ideas, presenting my research interests and the Lehigh Civil and Environmental Engineering Capabilities, and assessing the potential of student exchange between Lehigh and Qatar University. The major outcome of this visit is to start connections with faculty at Qatar University to initiate collaboration on research proposal(s) targeting QNRF.

Long-term

Once back at Lehigh, I will build on collaboration opportunities that seem promising based on the discussions with faculty members at Qatar University. I expect that this will lead to submitting a NPRP proposal. If successful, I expect that this project that will lead to further collaboration with other faculty and different departments at Qatar University. Furthermore, I envision that this will lead to multiple collaboration opportunities between faculty at Qatar University and faculty at the Civil and Environmental Engineering Department and/or other departments at Lehigh.

Professional Contact:

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Trip Details and Estimated Travel Budget (One Week)

Trip Date: May 2012

Flight: \$2000

Housing: \$170/night

Car: \$350/week

Food: \$400 total

Estimated Total: \$3940

Subject: RE: Research Collaboration for Qatar National Research Fund Proposal
From: "Mohd Jawad M Al-Khawaja" <khawaja@qu.edu.qa>
Date: 3/4/2012 2:34 PM
To: "Muhannad T. Suleiman" <mts210@Lehigh.EDU>

Dear Muhannad,

I am sending you this short email to confirm that we would very much like to have you come and visit us at Qatar University.

I believe your visit would help in sharing mutual research interests and in developing new collaboration opportunities with faculty here at Qatar University. During the visit, you and I will discuss mutual research interests and potential collaboration opportunities. Based on our initial discussions, research related to heat transfer and soil-structure interaction of pipelines seems of interest to both of us. Also during your visit, you can meet with several faculty members from different departments at Qatar University including Civil Engineering and Biological Sciences. We hope that this effort will lead to future research collaboration. On the long-term, I think knowing the capabilities at both institutions may also lead to assessing the potential of student exchange between Lehigh and Qatar University.

Looking forward to your visit.

Regards,
Mohammed J. Al-Khawaja

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