November 24, 2014

European Society of Cardiology The European Heart House 2035 Route des Colles - Les Templiers 06903 Sophia Antipolis FRANCE

Re: European Society of Cardiology First Contact Initiative Grant Report

I would like to extend my deep appreciation to the European Society of Cardiology Council for providing me with the First Contact Initiative Grant, which has provided me with the opportunity to visit and interact with Dr. Mauro Giacca and his research team at the International Centre for Genetic Engineering and Biotechnology from August 16 to August 29, 2014

The International Centre for Genetic Engineering and Biotechnology provides a scientific and educational environment of the highest standard and conducts innovative research. During my visit I had the opportunity to meet with Dr. Mauro Giacca and his respected members, who introduced me to each of their research projects.

My research centers on identifying therapeutic targets to treat cardiac hypertrophy, a predisposing factor that if left untreated results in heart failure. We have used various techniques (adenoviruses, siRNA and pharmacological inhibitors) to further identify important therapeutic targets that could be used as therapeutic interventions to treat cardiac hypertrophy. Our studies have focused on *in vitro* studies.

The goal of this grant was to setup a collaboration between our two labs and potentially identify key research interests between the research centre and colleagues at Qatar University. In addition, I was interested in learning how to translate some of my *in vitro* work into a *in vivo* model and the potential of using gene therapy as a therapeutic intervention. During my visit, I had the opportunity to work with personal from the adeno0associated virus core lab at the International Centre for Genetic Engineering and Biotechnology to watch them expand and amplify the viruses carrying a specific gene of interest and discuss what is needed to build such a core facility in my home institute. I also had the opportunity to work with a research associate who demonstrated how to induce myocardial infarctions in a mouse model, which was then treated with an adeno-associated virus carrying a specific gene of interest.

At the College of Pharmacy, Qatar University, we have a Master of Science Program and have received approval for a PhD program. During my visit, I was able to learn more about the graduate program offered at ICGEB. In fact, I was very impressed with the model being used at the ICGEB and forwarded the below recommendations to our Associate Dean of Research to consider for future initiatives and action in regards to our graduate program and expansion of research infrastructure.

- **PhD program logistics**: Students at ICGEB are expected to have their thesis introduction submitted in year two of the program. I believe this is something we could consider at the College of Pharmacy, Qatar University for our MSc students. Perhaps, this could be expected after completion of year one of the program in place of the oral comprehensive exam.
- Science café: annually the director of ICGEB hosts a science café (at their local museum) which is open to the public and media to ask any scientific questions about ongoing research at the research institute. I do believe this is a great way to involve the public in some of the ongoing research and something we may want to consider.
- Graduate program: ICGEB is open to student exchange if the opportunity arises.

We have continued our collaboration after my visit to Trieste, as we discussed the opportunity to host a joint conference/symposium in Doha, Qatar and the potentially of student exchange.

To summarize, the grant was extremely useful to identify collaborative projects between myself and Dr. Mauro Giacci's team and has also provided me with the opportunity to be exposed to European research laboratories. I look forward to collaborative project.

Finally I would like to thank Dr. Mauro Giacca for allowing me to visit his lab and greatly appreciate his feedback on my own research.

Yours sincerely,

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