



HOFSTRA UNIVERSITY®

FRANK G. ZARB SCHOOL OF BUSINESS

December 3, 2015

Small Business Administration
InnovateHER Competition
Erin Andrew, Assistant Administrator
Office of Women's Business Ownership
409 3rd Street, S.W. Suite 6600
Washington, DC 20416

Dear Assistant Administrator Andrew:

We are pleased to nominate QB Sonic, Inc. as the local winner of the Hofstra University InnovateHER Competition administered by the Center for Entrepreneurship. QB Sonic is a technology-based startup company based in Stony Brook, NY, that is developing a non-invasive ultrasound stimulator for maintaining bone mass at the femoral neck (hips) for the treatment of osteoporosis, which affects 55% of Americans age 50 and above, of which 80% are women. QB Sonic's business plan scored the highest in all three categories identified by the Small Business Administration.

- QB Sonic's product will have a measurable impact on the lives of women and families.

According to QB Sonic's business plan, Osteoporosis (OP) affects over 50 million women in the United States, 200 million women in China, and 80 million women in Europe. OP occurs primarily in people over 50, and causes 350,000 hip fractures per year in the United States. Approximately 20% of hip fracture patients require long-term nursing home care, and only 40% full regain their pre-fracture level of independence. Hip fractures result in a 10-20% mortality rate within one year. OP is currently treated with medications. The non-invasive bone stimulator, which functions through a hand-held controller and wearable transducer unit, could have an impact on the health of millions of women and help them lead more productive lives worldwide because its goals of regenerating tissue to maintain bone mass.

- QB Sonic's product has the potential for commercialization.

We are confident that QB Sonic's management team, Chief Executive Officer Sharon Barkume, J.D., M.B.A., and Chief Technology Officer Dr. Yi-Xian Qin, Ph.D., have the ability to commercialize the ultrasound stimulator. Ms. Barkume has been involved in the management of a number of high-tech startup companies. Prior to receiving her MBA, Ms. Barkume was a patent attorney for an early-stage venture capital firm. Dr. Qin is a Professor of Biomedical Engineering and Orthopedics and the Director of the Orthopedic BioEngineering Research Laboratory at Stony Brook University. In addition, the technology has been researched and developed at Stony Brook University through grants totaling over \$2 million from the National Institutes of Health, the National Space Biomedical Research Institute, the US Army Medical Research Institute, the Whitaker Foundation, and the New York State Centers for Technology. Stony Brook University has developed and tested a

first-generation lab prototype and is currently testing a second-generation lab prototype. QB Sonic also has a well thought-out intellectual property strategy. The company has signed an option agreement with Stony Brook University to exclusively license the intellectual property that covers the ultrasound stimulator and has negotiated the terms of the exclusive license. The company filed a pending provisional patent application in March 2015 and plans to file an additional provisional patent application by the end of 2015. Their strategy includes intellectual property protection in the United States and internationally. The company is also developing its regulatory approval strategy in the United States, Europe, and China.

- QB Sonic's product fills a need in the marketplace.

As stated above, the ultrasound stimulator will provide an alternative treatment option for millions of women suffering from osteoporosis. QB Sonic projects that the worldwide incidence of hip fractures in women is projected to increase by 240% by the year 2050. QB Sonic intends to market the product to doctors so they can prescribe it to their patients. QB Sonic states that there are products on the market for speeding fracture healing in the extremities and the spine, but there are no non-invasive ultrasound stimulators for maintaining bone health at the hip. QB Sonic has surveyed rheumatologists and found that their patients are worried about the long-term side effects of medications currently on the market to avoid hip fractures, which includes severe pain, stomach ulcers, gastrointestinal discomfort, irritation of the esophagus, osteonecrosis of the jaw (bone death), and atrial fibrillation. QB Sonic's competitive advantage is that they are developing a product that could maintain bone health at the hips without side effects.

In conclusion, we urge the Small Business Administration to consider QB Sonic as a semi-finalist candidate because the product could have a lasting impact on the lives of millions of women.

Sincerely,

Hofstra University Local InnovateHER Judges



Dr. Elizabeth Venuti
Senior Associate Dean of the Frank G. Zarb School of Business



Dr. Anne Hamby
Assistant Professor of Marketing and International Business



Dr. Veronika Ilyuk
Assistant Professor of Marketing and International Business