

**Regenerative Medicine Minnesota  
Progress Report  
Due: May 30, 2016**

**Grant Title:** Equipment to Support Product Development and Manufacturing at BRTI Life Sciences, a MN based Company that Offers Tissue-like 3D Matrix Technologies to Regenerative Medicine Researchers

**Grant Number:** MRM 2015 BB 007

**Requester:** Beth Lindborg/John Brekke, DDS

**Project Timeline:** May 1, 2015 – April 30, 2016

**Brief description of project:**

This grant requested funds to 1) Purchase a mechanical properties testing instrument (Bose 5500) to further characterize our current product as well as to aid in the development of new matrix technologies of different stiffness. 2) Purchase equipment that enabled us to expand our manufacturing capacity.

**Where did this project take place?**

The funds from this grant were used at BRTI Life Sciences in St Paul MN and in Two Harbor MN.

**People impacted by the project and where they are from:**

BRTI Team: St. Paul MN and Two Harbors MN

BRTI Customers: US/Europe

**What was the outcome of the project? (Did the project work the way you expected it to? What were the successes? What were the failures? How did it impact regenerative medicine in Minnesota?).**

This project enabled us to:

- 1) Further characterize the stiffness of our current matrix technology as well as our products under development. This capability is important in the field of regenerative medicine because cells will behave differently based on the stiffness of their environment.
- 2) Expand our manufacturing capacity.

**Please list any of the following that have resulted from your Regenerative Medicine Minnesota grant funding:**

Publications and/or manuscripts submitted for publication

Disclosures/patents

Other grant applications and/or awards

The equipment purchased under this grant was used to generate Cell-Mate3D product and data that contributed toward our recent manuscript submission entitled: "3D Cell Culture in a Self-Assembled Nanofiber Environment". This manuscript was submitted to PLOS ONE and is awaiting review.

**Responsible Spending: Please let us know how you spent the money. Any unspent funds must be returned.**

Please see attached invoices. The money was spent on:

- 1) Bose Electroforce 5500 Mechanical properties testing machine and related parts.
- 2) Other capital equipment used in the manufacturing process (freezers, autoclave, analytical balances, etc.).