Jennifer Bernard Merkowitz

I, _________________________________,

hereby submit this work as part of the requirements for the degree of:

Doctor of Musical Arts

in:

Composition

It is entitled:

The Cardiac Dance--The Spirals of Life

This work and its defense approved by:

Chair: Mara Helmuth

Michael Fiday

Joel Hoffman
The Cardiac Dance—The Spirals of Life

for fixed stereo audio soundtrack

A dissertation submitted to the
Graduate School
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By

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Abstract

The Cardiac Dance—The Spirals of Life is a one-act ballet inspired by the work of Drs. Francisco Torrent-Guasp and Gerald Buckberg. The “cardiac dance” is the twisting, pulsing rhythms of the human heart in motion, and “the spirals of life” refers to the natural helical shape of the heart muscle. Based on the work of Torrent-Guasp, Buckberg developed a new approach to dealing with congestive heart failure. This is the music for the original production, which premiered at the CCM Spring Dance concert on May 25-26, 2007. It is one part of the attempt to depict this revolutionary concept through dance, music and multimedia.

The piece begins with dancers demonstrating the notion that the spiral is a recurring formation throughout nature. The heart is one of these spirals, and Dr. Torrent-Guasp demonstrated that the heart unwinds like one continuous piece of rope. Scene One continues by mimicking the motion of a healthy heart. When the heart is healthy, it is conical in shape, like a football. In this shape, the heart is able to beat normally in a twisting/untwisting motion. Scene Two begins with a heart attack, and is followed by a progression into heart failure. When the heart becomes unhealthy, it loses its helical shape and becomes round like a basketball. Once the heart has lost its helical shape, it can no longer twist and untwist very well, thereby getting tired easily and losing its synchronous rhythm. Scene Three represents the real lives that are affected by the tragedy of heart failure and ends with the decision to have the surgical procedure pioneered by Dr. Buckberg. In Scene Four, the surgery is performed, effectively transforming the basketball back into a football. Scene Five represents the joy in the restoration of this natural spiral formation and the conclusions that can be drawn from these recent discoveries.

For more information on the science behind the cardiac dance, please see http://www.helicalheart.com/. The website for The Cardiac Dance project is http://www.thecardiacdance.com/.
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and

Dr. Gerald Buckberg, M.D.

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I would also like to thank my husband, Dave, for his constant encouragement and feedback during the composition of this piece, and my parents for their love and support.

This piece is dedicated to the memory of my grandfather, Anthony Catino, who died of congestive heart failure in 1998.
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The Cardiac Dance—The Spirals of Life

*MP3 file, stereo (17.5 MB), 19'08”*

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