

The Cardiac Dance—The Spirals of Life (2007)

Jennifer Bernard Merkwowitz, music

Shellie Cash, choreography

Richard Cawood and Tom Huston, video

Jakyung Seo, lighting design

Jacqueline Burris, set design

PROGRAM NOTES

The “cardiac dance” refers to the twisting, pulsing rhythms of the human heart in motion. It was originally premiered as a ballet involving dance, music and multimedia. There also exists a video version, which is a combination of the electronic music soundtrack and the visuals that were projected behind the dancers onstage.

The work is inspired by the work of Drs. Francisco Torrent-Guasp and Gerald Buckberg, cardiologists who developed a new approach to dealing with congestive heart failure. The piece begins with the notion that the spiral is a recurring formation throughout nature. This formation, as Dr. Torrent-Guasp discovered, also exists in the underlying architecture of the heart. He demonstrated that the heart unwinds like one continuous piece of rope. 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. A heart attack interrupts the normal function, 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. A middle section 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. The surgery is performed, effectively transforming the basketball back into a football. The piece concludes with the restoration of the 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 Cardiac Dance project website resides at <http://www.thecardiacdance.com>.

COMPOSER BIO

Jennifer Bernard Merkwowitz is a composer whose mission is to make new music captivating and accessible to everyone. Also a pianist, violist, and alto, Jenny writes both acoustic and electroacoustic music that incorporates influences from popular culture and music, hopefully appealing to trained musicians and non-musicians alike. Her music has been performed at the International Computer Music Conference and the Third Practice Electroacoustic Festival, among others. She has collaborated with many artists in different disciplines; recent projects include music for *The Cardiac Dance—The Spirals of Life*, a one-act ballet inspired by the work of cardiac surgeon Dr. Gerald Buckberg with choreography by Shellie Cash, and *PIX: Portable, Interactive*,

eXperimental, an installation with film artist Brooke Dagnan.

In 2007, Jenny graduated with a DMA in composition from the University of Cincinnati College-Conservatory of Music, where she studied with Mara Helmuth, Joel Hoffman, and Michael Fiday. She holds bachelors degrees in music and computer science from the University of Richmond, where she studied with Benjamin Broening. During the summer of 2005 and 2006, she taught computer music and composition at Interlochen Arts Camp in Michigan. Currently, she is a Visiting Assistant Professor of electronic music, composition and theory at the College of William and Mary in Williamsburg, Virginia.