

A Proposal to

Mr. Kevin Dwan

For support of

**The Sabrina Foundation
Center for Cardiovascular Health in
Pregnancy**



A Proposal for the Support of The Sabrina Foundation Center for Cardiovascular Health in Pregnancy At the Cleveland Clinic

Introduction

The Cleveland Clinic is a not-for-profit, multispecialty academic medical center that integrates clinical and hospital care with research and education. The Clinic was founded in 1921 by four renowned physicians with a vision of providing outstanding patient care based upon the principles of cooperation, compassion and innovation. Today, Cleveland Clinic is one of the largest and most respected hospitals in the world.

As a not-for-profit institution, the Clinic relies heavily on the support from outside organizations that wish to partner with us on our mission to provide better care of the sick, investigation of their problems and further education of those who serve. Consistently regarded as one of the biggest, best and most respected medical centers in the world, patients routinely select the world-class Cleveland Clinic for second opinions and treatment of complex or multiple medical problems, coming from all 50 states and more than 100 countries. In 2007, Cleveland Clinic was ranked fourth overall in the country of over 6,000 hospitals. In addition, the Cleveland Clinic hosts the largest, busiest, and most accomplished program of its kind, our Heart and Vascular Institute. We have earned the rank as the number one heart program in the nation by *U.S. News & World Report* for thirteen consecutive years.

Addressing an Urgent Need

Pregnancy should be the happiest time in a woman's life. However, complications during pregnancy often lead to not only a myriad of emotional stress and heartache, but more importantly preterm birth and sometimes death. Bed rest is often considered the gold standard for treating complications and can lead to frustration as women remove themselves from their daily lives. Productivity and personal goals often are put on hold while women and their families worry about the mother's and unborn child's health.

While we have made great strides in identifying medical issues through comprehensive obstetric care, hundreds of thousands of women are still suffering through challenging pregnancies and postpartum times. Even though we have seen a decrease in maternal mortality over the past 100 years, the rates seem to have stagnated since the 1980's. The leading causes of maternal complications and death are embolism and cardiovascular factors. Risk of maternal death increases with age; women between 35-39 years old have over three times the risk of pregnant and postpartum death than those in their early twenties. These statistics cause grave concern as women are having children later in life. Although the rates of preterm birth and maternal complications remain high, not one organization is dedicated to eradicating these medical catastrophes. Therefore, there is no leading resource for women to utilize when faced with a complication during pregnancy.

Funding is the key to grasping this magnificent opportunity to address these devastating issues and serve as a model for other programs worldwide. For this reason, Cleveland Clinic would like to invite the Sabrina Foundation to partner with us in our efforts to improve maternal cardiovascular diagnosis and treatment through the establishment of **The Sabrina Foundation Center for Cardiovascular Health in Pregnancy**. Your generosity will enable us to strengthen our important work in heart health and maternal wellness, by adding to our momentum of discovery and helping us to find new ways to eliminate the devastating impact of cardiovascular complications during pregnancy. Your commitment would serve as an investment in the future of medicine, with the extraordinary potential to improve countless lives for many years to come.

Center for Cardiovascular Health in Pregnancy Objectives

The purpose of the Center will be to gain a better understanding of pregnancy-related cardiovascular complications to eradicate maternal and postpartum death, utilizing the extraordinary resources available only at Cleveland Clinic. Rather than being constrained to one location, the Center will be a virtual existence so clinicians and researchers can work in tandem to advance knowledge, regardless of time and space. In order to achieve the goal, the Center will focus on the following three critical modules.

I. Molecular Research

In order to gain a greater understanding of the origins of cardiovascular complications, it is imperative to start with the molecular structures that cause the disease through powerful and innovative research techniques. The aim of this component of the Center will be to discover the detailed molecular structure mechanisms of cardiovascular cells and determine how these impact the clinical aspects of the pregnancy. Within the Center for Cardiovascular Health in Pregnancy, basic scientific researchers will study the disease at the molecular/cellular level, providing the findings that may lead to breakthrough clinical practices. A continuous flow of information between research and application will be embraced, allowing for clinical observations to drive the scientific research engine forward to new discoveries in the field of cardiovascular maternal and fetal health.

II. Clinical Studies

Utilizing both basic and translational forms of research, the area of Clinical Studies will examine all aspects of maternal cardiovascular health. The Center will scrutinize every aspect of cardiovascular health during pre-pregnancy through postpartum, beginning with the epidemiology of the disease to incorporating clinically meaningful research into cutting-edge clinical management. Investigation will focus on current diagnostic techniques, interventions, and risk factors to apply the findings to prevention and management programs. In the end, we will produce an all-encompassing approach to the prevention and eradication of this lethal disease.

III. Genetic Implications

Cardiovascular complications during pregnancy can have a devastating effect on families, both emotionally and through hereditary DNA. Therefore, to properly serve these patients, we need to educate them on signs and symptoms as well as conduct research to better understand the genetic links. An example research project is seeking an answer to, “Is there an inherited factor in certain

families that predisposes women to cardiovascular complications during pregnancy?” Such answers can lead to novel screening techniques, thus saving mothers’ lives. As breakthroughs emerge, the Center will provide mothers and their families with education on symptoms, risk factors, and disease management. In addition, we will advance the medical knowledge of future physician leaders by instituting resident rotations through the Maternal Fetal Center. Focused on expanding their understanding of maternal cardiovascular health, these residents will work closely with clinical physicians to follow cases and help publish findings. We will welcome guest lecturers from around the world to offer a global focus and will encourage our residents to travel outside the United States to partnering institutions to help further the global impact of the work achieved at the Center.

Inspirational Leadership

The Center for Cardiovascular Health in Pregnancy is a project of great scope and vision. Only a select few physicians would possess the incomparable combination of medical and administrative talent and experience to initiate this venture as Elliot Philipson, M.D. He is among the physician leaders whose untiring commitment to his work and many contributions to the understanding and treatment of complications during pregnancy will ensure the successful launch of this specialized Center.

As the Section Head for Obstetrics for 12 years, Dr. Philipson’s exceptional skills, compassionate patient care and clinical research provide a worldwide model for achieving healthy, full-term pregnancies. He has received honors in the field of obstetrics, and has pioneered numerous surgical and prenatal screening techniques. Philipson will launch the Center and set the foundation for future success and then help identify his successor. The future leadership of the Center will have the critical blend of cardiovascular knowledge and obstetrical experience to further the momentum and results pioneered by Dr. Philipson.

Under the exceptional guidance of Dr. Philipson, The Center for Cardiovascular Health in Pregnancy multidisciplinary team of researchers and clinicians will work to attain its goals and objectives while contributing to invaluable new research and information to the field of maternal wellness.

The Cleveland Clinic Advantage

Cleveland Clinic is uniquely positioned to achieve groundbreaking advances in cardiovascular health in pregnancy. As the number one Heart Center for thirteen years straight, our specialty team is clearly at the forefront of cardiac care. In addition, last fall we launched the Women’s Cardiovascular Center dedicated solely to understanding gender-based differences in cardiology. Scores of basic and clinical research projects related to women’s cardiovascular issues are underway here at any given time. These resources provide our Maternal-Fetal Medicine team with the opportunity to truly care for both mother and fetus in distress. In fact, this collaboration led to the first in utero balloon valvuloplasty to improve fetal blood flow through the heart. Discoveries such as these translate into new techniques and improvements in diagnosis, treatment and clinical outcomes for pregnant women and their unborn babies.

The Center for Cardiovascular Health in Pregnancy will bring a maternal focus to current and future cardiovascular projects by facilitating a team of physicians and researchers to work together for a multidisciplinary approach to maternal wellness. This specialized center will enable us to embark on a new era of excellence and realize our vision: to provide mothers with the most sophisticated and effective cardiovascular care in the world. Through the innovative application of care, education, and research, we hope to reach our ultimate goal of eradicating maternal and postpartum deaths from life-threatening disorders within the next generation.

An Invitation to the Sabrina Foundation

To help us realize our vision for eradicating maternal complications and death, we respectfully invite the Sabrina Foundation to consider a gift of \$5 million to establish **The Sabrina Foundation Center for Cardiovascular Health in Pregnancy**. This generous commitment would allow us to create the first-ever center dedicated solely to advancing healthcare for pregnant and postpartum women. With your support, the Sabrina Foundation Center for Cardiovascular Health in Pregnancy will bring together the very best physicians, researchers, and clinicians to give each mother the opportunity to enjoy a happy and healthy pregnancy.

For more than 80 years, the Cleveland Clinic has been at the forefront of medicine, helping individuals cope with disease and leading the search for new treatments and cures. Our request for support represents our desire to partner with you as we work together to expand and enhance maternal research around the world. We hope you will take this next step into the future and join us in this historic undertaking. We thank you for your thoughtful consideration of this request, which has the potential to positively impact the health and well-being of generations of individuals and families around the globe.