The Pulse of Progress AN INITIATIVE TO DEFY HEART AND VASCULAR DISEASE
The Pulse of Progress seeks new private investment in research and education to take CRF’s transformational work to new levels in the future.
Seeing the Future First

For 25 years, the Cardiovascular Research Foundation has pioneered innovations that have made a profound difference in the lives of millions of people with heart disease. Now, we are looking to the next 25 years.

We are launching the Center for Medical Research and Education—an initiative that will position CRF as the starting point for even more transformative ideas.

We are looking ahead to the next revolutions in heart care and imagining the part we will play.

We are dreaming big—defying the odds as we defy heart disease.

At CRF, we are looking to the future with determination, ambition, and hope—and we are asking you to join us.

“Our whole history at CRF has been envisioning the future first and then helping make it happen. The question now is ‘what will be the next breakthrough?’ We don’t know, but we’ll be major contributors to making new ideas become reality. We will ensure that physicians have the scientific evidence to help them care for their patients with heart and vascular diseases.”

MARVIN L. WOODALL
Campaign Chairman and CRF Board Member
A Force for Innovation

CRF is a leader in pioneering therapeutic approaches that change the treatment—and the lives—of heart patients around the world.

**OUR FOCUS**
At the Cardiovascular Research Foundation, we imagine, invent, and test new treatments, devices, and drug therapies to help doctors help people with heart and vascular disease. Resourceful and entrepreneurial, we often partner with industry to make progress, translating promising ideas into tools that work. We also educate the next generation of researchers who will lead the way to future breakthroughs. Our focus is on minimally invasive medicine, finding new and better ways to help patients improve their health and longevity, thereby avoiding the need for more complex surgeries.

**OUR STRENGTHS**
CRF brings together a team of exceptionally distinguished scientists: icons in the history of cardiac innovation who are also active clinicians. They are grounded in the realities of daily practice and inspired by the needs of the patients in their care. At CRF, this world-class team refines and validates new therapies in their earliest stages in preparation for clinical trials. They lead first-in-human trials and then scale up to the randomized studies needed to achieve FDA approval. Finally, they train other physicians in the use of the technologies that CRF and others pioneer. No other organization aligns this combination of capabilities with the same practical goal: to get better therapies into doctors’ hands quickly.

**OUR VISION**
With the launch of the Center for Medical Research and Education, CRF plans to bring our independent research to a new level, opening more paths of inquiry. We will expand and formalize our fellowship program to prepare the next generation of research leaders in the field. We will explore new interactive approaches in innovation, education and outreach, bringing state-of-the-art techniques to more doctors, more efficiently and effectively.

“When we envisioned CRF, it was with the hope of helping more patients with heart disease. Since then, CRF has played a major role in this revolution of care, and that revolution is continuing.”

MARTIN B. LEON, MD
Founder and Chairman Emeritus
Co-Director, Medical Research and Education

“At CRF, we focus on innovation and acceleration. It can take 15 years or more for the latest science to reach patients in the form of new therapies. We are working both to speed the pace of investigation and to shorten the process of research translation.”

GREGG W. STONE, MD
Immediate Past Chairman
Co-Director, Medical Research and Education
A Remarkable Record of Achievement

CRF founders wanted to create an organization to accelerate research and foster innovation in interventional cardiovascular medicine. Each year, our scientists publish some 250 articles in top journals, and over the years, their work has changed the face of cardiac care. Consider a few of the milestones in which we’ve played a decisive role.

**Balloon Angioplasty:**
the revolution that launched interventional cardiology, reducing the need for bypass surgery

**Stents:**
tiny mesh sleeves that hold arteries open after angioplasty

**Drug-eluting Stents:**
a version of the device delivering a steady dose of medicine to prevent artery reblockage

**Bioresorbable Stents:**
tiny mesh sleeves that disappear over a span of years, reducing risk of complications

**TAVR:**
replacing damaged heart valves without open heart surgery, allowing much shorter recovery time

**Robotical Angioplasty:**
even more precise than the traditional procedure

**Heart Failure Devices:**
innovative minimally invasive devices and therapies

**Cell Therapy:**
using heart stem cells to repair damaged heart muscle after heart attacks

1980

CRF is Founded

1990

2000

2010

2020
New Frontiers

We are committed to accelerating innovation in the treatment of heart and vascular disease.

At CRF’s founding a quarter-century ago, the use of stents to open blocked arteries was still a novel idea. Today it is the standard of care for those with coronary artery disease—in large part because of CRF’s work in validating the technology.

We’ve helped make equally impressive gains in aortic valve replacement too. Once, this required open-heart surgery. Now through a transcatheter procedure, we can replace damaged heart valves via a small incision in the groin or chest.

CRF stands on the threshold of breakthroughs that could have just as large an impact in other promising areas—taking medicine into territory until recently considered science fiction.

ADVANCED IMAGING—How can we detect heart disease before it causes damage, avoiding the need for angioplasty, stents, open heart surgery, and drugs? New uses of CT (computerized tomography) and other imaging technologies may help us identify patients at risk so we can treat them proactively. Imaging can reveal vulnerable plaque in blood vessels, and especially the coronary arteries of the heart. Vulnerable plaque is an inflammatory collection of white blood cells and cholesterol in the wall of an artery—that is particularly unstable and prone to rupture producing sudden major problems such as a heart attack or stroke.
NEW VALVE TREATMENTS—
How can we replicate the success of transcatheter aortic valve replacement (TAVR) with minimally invasive treatments for other valves in the heart— the mitral, tricuspid, and pulmonary valves?

CARDIAC AND VASCULAR GENETICS—How can we move beyond the repair of heart and vascular damage to address its root causes? Understanding the genetic factors behind heart disease could open the way to much earlier detection, resulting in prevention of fatal heart attacks and more effective treatments.

ORPHAN DISEASES—How can we help those with heart issues that are too rare to attract commercial research investment? With new non-commercial sources of funding, we hope to find solutions by launching projects in pediatric interventional cardiology, as well as innovations to help people with structural heart defects or vascular system issues.

REGENERATIVE MEDICINE—How can we help damaged heart muscle to heal and regain strength, activating the body’s own resources to restore injured tissue? Stem cell therapy offers exciting possibilities.

Each new avenue we pursue is focused on creating new opportunities for success, new innovations, and lives saved.

“CRF is a research powerhouse, an example of American innovation leadership at its very best. The key to our future is securing the funding so we can say yes to more of the ideas waiting to be developed.”

JUAN F. GRANADA, MD
Executive Director and Chief Innovation Officer
CRF Skirball Center for Innovation

“One day we’ll look back on today’s interventions as crude early measures. There is enormous potential in our research to find more powerful and sophisticated therapies.”

ORI BEN-YEHUDA, MD
Executive Director, CRF Clinical Trials Center
Our Plan for Progress

CRF is seeking contributions in four key areas of priority—investments that will help us speed the pace of innovation and extend its reach.

THE SKIRBALL CENTER FOR INNOVATION—$4.0 MILLION
At Skirball, new ideas become tangible realities. Since its founding in 2005, the Center has helped bring more than 20 technologies through the testing process and into use in patients. However, the number of promising ideas waiting to be developed far outpaces the funding for our current research.

Through this campaign, we aim to change that reality. We seek ‘innovation funding’ for new projects, particularly to seed early-stage efforts through proof-of-concept. Our goal is to become an innovation incubator in our own right – connecting philanthropic investors with the kind of fast-moving ideas that will yield tomorrow’s breakthrough treatments.

Skirball is also seeking funding for an “innovation channel.” This digital media platform will educate physicians and patients on the technological and procedural advances in cardiovascular healthcare through meaningful high quality media and interactive content. It will primarily focus on innovations in catheter based technologies and therapies.

Opportunities for Investment
• Project funding for new research initiatives
• Support for additional specialized staff
• Funding for development and maintenance of innovation channel

FELLOWSHIP AND SCHOLARSHIP FUND—$2.5 MILLION
At any given time, more than a dozen doctors and scientists from around the world are visiting CRF, spending a year or more for an experience of unparalleled professional growth. It is a chance for these fellows not only to learn advanced clinical techniques, but also to build the skills required to lead research programs and major clinical trials. We bring together the brightest minds from around the globe to generate new and innovative ideas in cardiovascular medicine.

By endowing new positions, we aim to expand the number of fellows we train and also welcome outstanding candidates from developing countries—men and women who will return home prepared to transform the local practice of cardiac care for their patients.

Opportunities for Investment
• Endowed fellowships providing full two-year support
• Scholarships funding travel and professional development

EDUCATION AND OUTREACH—$2.5 MILLION
From the start, CRF has made its mark on the practice of medicine not only through research, but just as importantly, by training physicians in new procedures—helping get the latest advances to patients quickly.

Our conference, Transcatheter Cardiovascular Therapeutics (TCT) is the world’s premier meeting of its kind, and it’s just one of some 50 annual CRF events.

Going forward, we will expand this robust educational program, particularly through virtual interactive training sessions. These offer the
chance for physicians to learn even highly complex procedures remotely—an efficient, cost effective approach with global reach. CRF is already a leader in virtual education. With new funding we will go further, expanding our programming and employing even more powerful learning methods (e.g., cardiac simulators, 3-dimensional models, smartphone apps) to give doctors the cutting edge tools and techniques they need to treat their patients. We’ll also increase our investment in technology to expand our global footprint, from reaching more of the international community to better monitoring advances in research worldwide.

In addition, we will broaden our outreach to members of the general public and patient population through a comprehensive awareness program. The goal is more effective preventive education and broader awareness of state-of-the-art therapies—bringing more people closer to the best technology.

Opportunities for Investment

• Funding for the infrastructure of a new Interactive Training Center
• Support for expanded public education

WOMEN’S HEART HEALTH INITIATIVE—$1 MILLION
Cardiovascular disease remains the number one killer of women, yet many are unaware of their own risk factors, and how to manage them. The CRF Women’s Heart Health Initiative was founded to reduce gender disparity in cardiovascular care using a two-pronged approach: advocating for increased female representation in clinical trials and raising awareness about women and heart disease through “Mini Med School” educational seminars. Our Mini-Med School seminars feature leading experts who give women the tools to take better care of themselves and their loved ones.

Opportunities for Investment

• Support for educational Mini-Med School seminars
• Funding for advocacy efforts to increase female representation in clinical trials
Inviting Your Support

With additional sources of donor funding, CRF will pursue new frontiers in cardiovascular medicine, helping more people with heart disease in more profound ways.

CRF is a 501(c)3 non-profit academic research organization with a big vision. We are committed to pursuing new areas of discovery, to educating the next generation of leaders in clinical practice and research, and to supporting physicians far and wide in bringing state-of-the-art therapies to their patients.

In each of these areas we have already made a significant impact. As we celebrate our 25th anniversary, we now have the chance to take our work to a new level. The key to our success will be investment on the part of friends who believe in us.

A quarter century ago, no one could have foreseen the innovations CRF would bring to cardiovascular care. A quarter century from now, people will thank those who backed us in going further.

We invite you to step forward and join that visionary circle. Make your commitment to the Pulse of Progress Initiative today.

To discuss your support for The Pulse of Progress Initiative, contact Irma Damhuis at 646-434-4690 or idamhuis@crf.org.

“CRF is dedicated to mentoring the next generation of physicians, not only by teaching them how to do research and how to publish, but also teaching them the latest analytic techniques and instilling in them an extraordinary work ethic, a devotion to excellence, and a desire to continually improve and refine patient care.”

GARY S. MINTZ, MD
Chief Medical Officer

“Philanthropic funding will allow us to expand our physician training programs, beyond those currently in existence, bringing the latest advances to physicians and their patients as quickly as possible.”

JOSHUA D. HARTMAN, MBA
Executive Director, CRF Center for Education
Today…
Heart disease remains the #1 cause of death in the US and globally.
Every 34 seconds, one American has a coronary event.
Every year, heart disease and stroke cost the nation $315 billion—more than all cancers combined.

Tomorrow…
We see a far brighter picture.

“We count our success in the healthy days a mom, dad or grandparent lives because of our work—and the many other lives that person’s life touches. The value of a new breakthrough is immeasurably personal.

Ultimately this campaign is not about research or technology. It’s about helping doctors help more patients to defy a personal and devastating disease.”

ERIC B. WOLDENBERG, ESQ.
Chairman, CRF Board of Directors