The Cardiovascular Center (CVC) has awarded four Pre-Program Project Grant (PPG) awards to Cardiovascular Center members:

- **Jennifer Strande, MD, PhD.** Program Director, for her project entitled, “Mitochondrial Function Disparities Contributing to Cardiovascular Toxicity from Radiation Therapy”, with Co-Investigators Christopher Chittambar, MD, Carmen Bergom, MD, PhD, Andreas Beyer, PhD, Elizabeth Jacobs, MD, Meetha Medhora, PhD, John Baker, PhD, Jason Rubenstein, MD, Rodney Sparapani, PhD, & Jessica Olson, PhD.

- **Mingyu Liang, MB, PhD.** Eminent Scholar, Program Director for his project entitled, “Genetic and Epigenetic Mechanisms of Hypertension”, with Co-Investigators Allen Cowley, Jr., PhD, James J. Smith & Catherine Welsch Smith Professor of Physiology, Harry & Gertrude Hack Term Professorship in Physiology, Andrew Greene, PhD, Dr. Robert D. and Dr. Patricia E. Kern Professor of Biotechnology and Bioengineering & Aron Geurts, PhD.

- **Daisy Sahoo, PhD.** Program Director, for her project entitled, “Metabolic Control of Inflammation in Atherosclerosis by Macrophage Scavenger Receptors”, with Co-Investigators Roy Silverstein, MD, Albert Girotti, PhD, Mary Sorci-Thomas, PhD, & Michael Thomas, PhD.

- **John Auchampach, PhD.** Program Director, for his project entitled, “Signaling Mechanisms Underlying Cardiac Regeneration” with Co-Investigators John Lough, PhD, Caitlin O’Meara, PhD, & Brian Link, PhD.

These investigators’ research represents the CVC’s goal to elevate our Signature Programs to the next medal level (from Bronze to Silver to Gold) by investing in team science that will produce program project grants or similar extramural awards.

The funds for these awards are part of the CVC’s AHW Research and Education Program (AHW-REP) parent award, “The Cardiovascular Roadmap: Bridging our Foundations to ‘Signature Programs’” and/or general institutional funds given to the CVC for the Signature Program Pre-PPG Awards, and by philanthropic support given by MCW’s Cancer Center and pledged to the CVC for the Signature Program Pre-PPG Award: Cardio-Oncology Focus.

The awards are valued at $100,00 for Year 1, with another $100,000 for Year 2 contingent on adequate progress in Year 1.

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**CVC Celebrates 25 Years of Research; Honors Dr. Allen Cowley, Jr., and Dr. David Harder**

Aug 21, 2017 — The Cardiovascular Center at the Medical College of Wisconsin celebrated its 25th anniversary on August 21 with a dinner at the Wisconsin Country Club in Milwaukee, in conjunction with the CVC’s annual Golf Challenge. The theme of the event was 25 Voices of the CVC. Since 1998, the event has raised approximately $1.4 million for cardiovascular research at MCW.

The “voices,” displayed on posters throughout the venue, represented the many hundreds of individuals who have made the CVC such an important source of new research into cardiovascular diseases.

These individuals include researchers, physicians, students, postdoctoral fellows, patients, alumni, CVC board members, and donors.

The celebratory dinner also paid tribute to the leadership of two individuals who helped shape the CVC as we know it today: David Harder, PhD. Kohler Co. Professor in Cardiovascular Research and founding director of the CVC (serving from 1992 to May 2009) and Allen Cowley, Jr., PhD. James J. Smith & Catherine Welsch Smith Professor of Physiology Harry & Gertrude Hack Term Professorship in Physiology, who served as director from 2009-2013.
Cardiovascular Center Director, Dr. Ivor Benjamin, Named President Elect of American Heart Association

June 30, 2017 - Wauwatosa Now — Ivor J. Benjamin, MD, FAHA, professor of medicine and director of the Cardiovascular Center at Froedtert Hospital and the Medical College of Wisconsin (MCW), has been named president elect of the American Heart Association’s (AHA) Board of Directors. Dr. Benjamin, who previously served as chair of AHA’s research committee, will serve as president elect from June 2017 to July 2018, president for the 2018-19 term as past president from 2019-20.

“I am humbled and honored to be nominated for such major leadership roles in the American Heart Association, the largest professional organization commitment to the prevention, detection and treatment of heart disease and stroke both nationally and internationally,” said Dr. Benjamin.

The board of directors is the final authority on AHA operations, including being responsible for the control and management of funds, the approval of long-range goals, policies approval of policies and standards. The board is also the final say on matters of employment of the chief executive officer and approval of the AHA budget. As president, Dr. Benjamin will also chair the Science Advisory & Coordinating Committee at AHA, among numerous additional duties.

“Congratulations to Dr. Ivor J. Benjamin on his election as President of the American Heart Association,” said John R. Raymond, Sr., MD, president and CEO of MCW.

Dr. Benjamin said that as president of the AHA he looks forward to continuing MCW’s mission to improve cardiovascular health through cutting-edge research with an emphasis on training the next generation of leaders and stakeholders who are collectively committed to improving health equity in all communities.

“As part of the AHA’s national leadership team, I will continue to advocate on how best to leverage such opportunities both for our community here in Southeast Wisconsin and the nation,” said Dr. Benjamin.
Recent Collaborative Member Publications

Abais-Battad, JM; Dasinger, JH; Fehrenbach, DJ; Mattson, DL. Novel Adaptive and Innate Immunity Targets in Hypertension. PHARMACOLOGICAL RESEARCH, 120 109-115; 10.1016/j.phrs.2017.03.015 JUN 2017

Gebremedhin, D; Zhang, DX; Weihrauch, D; Uche, NN; Harder, DR. Detection of TRPV4 Channel Current-like Activity in Fawn Hooded Hypertensive (FHH) Rat Cerebral Arterial Muscle Cells. PLOS ONE, 12 (5):10.1371/journal.pone.0176796 MAY 4 2017

Geddes, GC; Stamm, K; Mitchell, M; Mussatto, KA; Tomita-Mitchell, A. Ciliopathy Variant Burden and Developmental Delay in Children with Hypoplastic Left Heart Syndrome. GENETICS IN MEDICINE, 19 (6):711-714; 10.1038/gim.2016.167 JUN 2017

Ginde, S; Goot, BH; Frommelt, PC. Imaging Adult Patients with Fontan Circulation. CURRENT OPINION IN CARDIOLOGY, 32 (5):521-528; 10.1097/HCO.0000000000000422 SEP 2017

Hoo, AJS; Brown, K; Lewis, B; Malinowski, M; Wolfauer, M; Lee, C; Seabrook, G; Rossi, P. Outcomes of Ruptured Abdominal Aortic Aneurysms Following Flight-For-Life and Ground Transport Transfers to a Tertiary Referral Center. JOURNAL OF VASCULAR SURGERY, 65 (6):145S-145S; S JUN 2017

Hou, ET; Sun, N; Zhang, FC; Zhao, CY; Usa, K; Liang, MY; Tian, ZM. Malate and Aspartate Increase L-Arginine and Nitric Oxide and Attenuate Hypertension. CELL REPORTS, 19 (8):1631-1639; 10.1016/j.celrep.2017.04.071 MAY 23 2017

Matsuura, TR; Bartos, JA; Tsangaris, A; Shekar, KC; Olson, MD; Riess, ML; Bienengraeber, M; Aufderheide, TP; Neumar, RW; Rees, JN; McKnite, SH; Dikalova, AE; Dikalov, SI; Douglas, HF; Yannopoulos, D. Early Effects of Prolonged Cardiac Arrest and Ischemic Postconditioning during Cardiopulmonary Resuscitation on Cardiac and Brain Mitochondrial Function in Pigs. RESUSCITATION, 116 8-15; 10.1016/j.resuscitation.2017.03.033 JUL 2017

Wohlauer, M; Brier, C; Kuramochi, Y; Eagleton, M. Preoperative Hypoalbuminemia is a Risk Factor for Early and Late Mortality in Patients Undergoing Endovascular Juxtarenal and Thoracoabdominal Aortic Aneurysm Repair. ANNAALS OF VASCULAR SURGERY, 42 198-204; 10.1016/j.avsg.2017.03.058 JUL 2017

Yang, M; Cooley, BC; Li, W; Chen, YL; Vasquez-Vivar, J; Scoggins, NO; Cameron, SJ; Morrell, CN; Silverstein, RL. Platelet CD36 Promotes Thrombosis by Activating Redox Sensor ERK5 in Hyperlipidemic Conditions. BLOOD, 129 (21):2917-2927; 10.1182/blood-2016-11-750133 MAY 25 2017

Yang, M; Camara, AKS; Aldakkak, M; Kwok, WM; Stowe, DF. Identity and Function of a Cardiac Mitochondrial Small Conductance Ca2+-activated K+ Channel Splice Variant. BIOCHIMICA ET BIOPHYSICA ACTA-BIOENERGETICS, 1858 (6):442-458; 10.1016/j.bbabio.2017.03.005 JUN 2017

Want to see your publications here? Email your in-press or published citations to cvc@mcw.edu.
Office of Research Awards 7 Researchers with New Equipment

The Office of Research recently awarded 7 researchers, including two CVC investigators, with new equipment at the close of FY17. These new resources will help advance current projects, not only for these 7 investigators, but for their lab teams, departments, and the MCW research community. The following CVC researchers received new equipment:

Alexander Staruschenko, PhD, was awarded a Fluor Attachment and Filter Set upgrade for a Nikon SMZ1270 microscope in the Physiology Department. The improved microscope will allow Dr. Staruschenko and his colleagues, including Drs. Aron Geurts, Matthew Hodges, and Oleg Palygin, to quickly and more efficiently screen the fluorescent markers that identify successful genome modifications.

Xiaowen Bai, MD, PhD and her Anesthesiology lab team have been studying the potential negative effects of general anesthetics on the developing brain. Long non-coding RNAs (IncRNAs) highlight the effects of general anesthetics in many biological and pathological processes, such as neurodegenerative diseases. Using their new Motorized Lab Standard Stereotax for Rat and Mouse, Dr. Bai and her team will be able to deliver reagents to the mouse brain and study mechanisms of actions of IncRNAs following anesthetic exposure.

David Gutterman, MD Awarded Michael J. Dunn, MD Award for Research Excellence

June 9, 2017 MCW News—Congratulations to David Gutterman, MD, Northwestern Mutual Professor of Medicine, Associate Director of the Cardiovascular Center, for being awarded the Michael J. Dunn, MD Award for Research Excellence. It was awarded in recognition of the outstanding commitment to generating new knowledge and insights by the Department of Medicine.

Community Engaged Research (CEnR) Seed Grant Program: Cardiovascular Focus

A Request for Proposals (RFP) was released in mid-June for this competitive funding opportunity that focuses specifically on Community Engaged Research (CEnR) projects studying cardiovascular health and/or disease.

These exciting opportunities are made possible by the Cardiovascular Center’s parent award from the Advancing a Healthier Wisconsin Endowment Research and Education Program (AHW-REP), philanthropic contributions to the CVC, and collaborative efforts with Medical College of Wisconsin’s Community Engagement Core.

The CVC is committed to partnering with the Community Engagement Core’s Seed Grant program to increase multidisciplinary collaborations to improve the translational impact of cardiovascular health and disease research at the population/community level. By promoting and encouraging the CEnR approach, the CVC aims to develop a platform for cardiovascular faculty investigators from different areas of emphasis to work together to identify solutions to the cardiovascular health challenges in southeast Wisconsin and beyond.

Reaching out to bring CARDIOVASCULAR RESEARCH to the COMMUNITY

Application Deadline: Friday, September 8th
Please contact Militza Bonet, MPH (Cardiovascular Center, 414-955-4303, mbonet@mcw.edu) or Sarah O’Connor (Community Engagement Core, 414-955-5726, spoconnor@mcw.edu) with questions.
| **Carmen Bergom, MD, PhD**  
Assistant Professor  
Department of Radiation Oncology |
| **Elizabeth Gore, MD**  
Professor  
Department of Radiation Oncology |
| **Jeanne James, MD**  
Chief, Professor  
Department of Pediatrics  
Division of Cardiology |

**Carmen Bergom, MD, PhD**  
Assistant Professor  
Department of Radiation Oncology  

Her clinical practice has highlighted the importance of minimizing normal tissue toxicities in patients receiving radiation therapy. She is working to identify biomarkers that can predict radiation damage to the heart to protect against injury.

| **Christopher Chitambar, MD**  
Professor  
Department of Medicine  
Division of Hematology & Oncology |
| **Julie Freed, MD, PhD**  
Assistant Professor  
Department of Anesthesiology |
| **Mary Shimoyama, PhD**  
Associate Professor  
Department of Biomedical Engineering |

**Christopher Chitambar, MD**  
Professor  
Department of Medicine  
Division of Hematology & Oncology  

His research focus is iron metabolism and agents that perturb cellular iron metabolism. He is interested in iron-mediated toxicities of cancer therapy on the heart and vascular biology, including tumor angiogenesis.

**Julie Freed, MD, PhD**  
Assistant Professor  
Department of Anesthesiology  

Dr. Freed’s research interests include microvascular dysfunction, specifically how sphingolipids promote or prevent cardiovascular disease. As a cardiac anesthesiologist, she is also interested in intraoperative blood pressure control.

**Mary Shimoyama, PhD**  
Associate Professor  
Department of Biomedical Engineering  

Dr. Shimoyama’s research interests include the development and implementation of standard vocabularies and formats essential to data integration, database structures, innovative data mining, analysis and presentation tools. She is the PI of the Rat Genome Database which incorporates multiple genomic and phenotypic data related to cardiovascular disease for rat, human, mouse, and other organisms.
Milwaukee High School Student Wins International Award for Research Conducted in CVC Lab

August 2017 MCW News — A junior at the University School of Milwaukee will soon have his name written in the stars. Nabeel Quryshi won the prestigious First Place Grand Award in Biomedical and Health Sciences at the Intel International Science and Engineering Fair in Los Angeles in May for a research project he conducted in the Cardiovascular Center’s laboratories, specifically Dr. David Gutterman’s lab. He earned $3,000 and an asteroid or minor planet names after him.

With Dr. David Gutterman, senior associate director of the Cardiovascular Center, and Dr. Andreas Beyer, assistant professor of medicine and physiology, Quryshi researched the detrimental cardiovascular effects of chemotherapy. “Working with Dr. Beyer and Dr. Gutterman has been a privilege and honor of the highest degree,” Quryshi said.

Quryshi’s project was a culmination of almost two years of work, and Quryshi said he hopes to continue working with both Dr. Gutterman and Dr. Beyer in the future to advance the research.

CVC Trainee Wins AHA Predoctoral Fellowship Award

Congratulations to Sarah Proudfoot, a graduate student in Dr. Daisy Sahoo’s lab, for being awarded a predoctoral fellowship from the American Heart Association for her proposal, “Regulation of cholesterol Transport by Structural Features in Scavenger Receptor-BI’s Transmembrane Domains.”

Summer Workshops for CVC Postdocs & Graduate Students

Funded in part by the Advancing a Healthier Wisconsin Endowment grant awarded to the Cardiovascular Center, workshops for CVC trainees included “Do You Have the Skills for Industry?”, presented by the Postdoc Industry Consultants, a biotechnology initiative of the Medical College of Wisconsin, and “Saving Files for Journal Submission”, led by MCW’s Office of Communications design lead, Kristin Pelisek.
Two MCW Community Members Launch Underground Science Society to Keep Science Discussion Going

June 9, 2017 MCW News — Monica Kerschner and Jessica Olson, PhD LOVE science. The self-described nerds live and breathe it all day long in their roles at MCW — Jess is an assistant professor in the Institute for Health and Society, and Monica is a physician assistant in orthopaedic surgery. But the two wanted more.

Late in 2016, Monica approached Jess with a crazy idea. She wanted to start a free science series that would reach people from all backgrounds, all levels of education, and share science of all disciplines. And so the Underground Science Society was born.

"When we began, we weren’t sure if people would come, or if speakers would like the format. But the enthusiasm from the audience and participants has been amazing. Science is responsible for groundbreaking discoveries in health and the world around us, and we love that the Milwaukee community has embraced the opportunity to interact with the researchers doing great work right in our own backyard," shared Jess.

The second Monday of each month, approximately 50 likeminded people convene at the Sugar Maple Bar in Bayview to learn about amazing research and science going on around Milwaukee. Speakers to date include Dr. Mark McNally and Dr. Peter LaViolette, both from MCW, Craig Berg from the Milwaukee County Zoo, Caitlin Reinartz from the Urban Ecology Center, and Dr. John Werner from Wisconsin Lutheran College, presenting on topics ranging from aquaponics to 3D printing to genetic disease.

Their most recent meeting combined art and science, screening “Lo and Behold: Reveries of a Connected World,” a film by Oscar-nominated documentarian Werner Herzog that examines how the internet and technology have shaped our world.

“This is a really important program, because we’re giving everyone access to the amazing research and brilliant individuals in our community," said Monica. “Plus, it’s just a great time! Anyone, no matter what their background, will get something out of these events.”

Want to learn more or submit a topic or suggested speaker? Check out their website: ussmke.com

The Advancing a Healthier Wisconsin Endowment is pleased to invite you to our fourth Conversations with Scientists series, The Life Force Within: Your Heart and Blood Vessels. This four-part event invites the public to learn about the groundbreaking changes taking place in biomedical research, medical education and health care at MCW today.

This free fall 2017 series will explore a range of cardiac-related health issues, including hypertension, personalized medicine, vascular disease, and more!

WHEN: October 25, November 1, 8, and 15; Doors open and light refreshments will be available at 6 p.m. Conversations will begin promptly at 6:30 p.m., ending at 8:30 p.m.

WHERE: Kerrigan Auditorium, MCW

FOR MORE INFO: http://tinyurl.com/MCW-CVC-Life-Force-Within
**Vitamin D, Just for You**

We have a research opportunity for women who are:

- Postmenopausal, African American (African ancestry)
- Willing to take a set amount of vitamin D supplements during the study
- Willing to use sunscreen when in the sun for more than 15 minutes (May-Sept)

Taking vitamin D pills does not have the same effect on the body in all people. Detailed blood testing for vitamin D may give more information about the right dose for each person. To learn more about this, the Medical College of Wisconsin is running a six-month study to evaluate a new approach that may improve blood vitamin D levels.

The study includes:
- Blood testing
- Body composition evaluation
- Vitamin D supplementation

All study procedures, testing, and study supplements are free. Study participants will receive a total of $85 for completing four clinic visits. To find out more about how you may be able to participate, call 955-7438 and ask for TAILORED.

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**Needed: Volunteers for Research Study Assessing Workplace Interventions to Reduce Sedentary Behavior**

Researchers from the Medical College of Wisconsin and University Wisconsin-Milwaukee are performing a clinical research study assessing workplace interventions to reduce sedentary behavior in MCW office workers. Males and females are both encouraged to participate and must be between the ages of 18-50.

Four 3-4 hour visits to the MCW Adult TRU (Froedtert Pavilion Building) for study visits, ultrasound of your arm or leg, blood tests, accelerometer activity assessments, and use of a sit-stand desk will be required. Compensation is $150 for this 27-week study.

Interested? Contact Jacquelyn Kulinski, MD, 955-6896 or jakulinski@mcw.edu.

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**Volunteers with Coronary Artery Disease Needed**

Researchers in the Eye Institute at MCW are looking for volunteers with a clinical diagnosis of coronary artery disease to participate in a study on retinal vasculature.

The study involves a brief questionnaire, behavioral tests of your vision, an eye exam, and retinal imaging using a number of different devices.

You will receive a $25 stipend for your participation. The study takes about 30-40 minutes to complete.

The study is being directed by Dr. Joseph Carroll, the Richard Schultz, MD/Ruth Works Professor in Ophthalmology.

Interested? Contact Phyllis at aoip@mcw.edu or call (414) 955-2647.

Note: In order to be a qualified participant, MCW employees must meet the requirements under the Participation as Research Subjects Corporate Policy.

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**Volunteers with High Blood Pressure**

**Males, Ages 30-65 and Women, Ages 50-65**

If you are a man between the ages of 30-65 years or a woman between the ages of 50-65 years and have high blood pressure, you may be eligible to participate in a research study being conducted at MCW.

The purpose of this research study is to understand the effect of salt on blood pressure.

If you qualify, you will be compensated for your time and effort.

Interested? Please call (414) 955-7467.

Note: In order to be a qualified participant, MCW employees must meet the requirements under the Participation as Research Subjects Corporate Policy.
Brian Smith, PhD, Named 2017 Michael H. Keelan Jr., MD Scholar

Brian Smith, PhD, assistant professor of biochemistry, has been named the 2017 Michael H. Keelan, Jr. MD Scholar. This $25,000 award is made possible by the Michael Keelan, Jr. Research Foundation Grant, an endowment managed by the Greater Milwaukee Foundation and designated for cardiovascular research at the Medical College of Wisconsin Cardiovascular Center. The fund, established by the Tendick Family, honors the life and career of Michael H. Keelan, Jr., MD, '60, whose career as a cardiologist spanned several decades.

Dr. Smith is funded for his project entitled, “Bromodomains and Epigenetic Regulation in Cardiovascular Disease”.

2017 Have a Heart Motorcycle Ride

The 2017 CVC Have a Heart Motorcycle Ride took place on Saturday, June 10. It was a beautiful sunny, but windy day, with 120 riders and 90 bikes at the event. This year marked the 9th annual Ride, and to date, has raised over $131,000 for cardiovascular research. Many thanks to the presenting sponsors, Harley-Davidson Suburban Motors and the HOG Suburban Milwaukee Chapter, as well CVC board members Jack McKeithan, Danny Muchin, and Bill Mielke for continuously supporting this wonderful event.

From the Cardiovascular Center Board Chair

As the 25th Anniversary celebration of the CVC continues throughout the year, I’d like to thank everyone who supported the annual CVC Golf Challenge and Anniversary Dinner which took place on August 21st at the Wisconsin Country Club. August 21st also marked the rare solar eclipse day, so all golfers were equipped with eclipse glasses and glow in the dark golf balls!

After a fun day on the course, guests arrived for the dinner celebration, where the venue was branded with “25 Voices of the CVC,” including profiles of many researchers, doctors, students, PhDs, donors, and alumni. The dinner program showcased 25 years of research, and a special tribute from Dr. Raymond to former CVC Directors, Allen W. Cowley, Jr., PhD and David R. Harder, PhD. In addition, Dr. Benjamin accepted a dedication gift on behalf of the CVC of a 3D printed heart model – a technology which will be used in the near future for personalized cardiovascular research. Proceeds from the event will support the four pillars of the CVC including research, education, community outreach and clinical care.

If you missed the event, but would like to support ongoing research for the next 25 years, please contact Natalie Strade in the development office at 414-955-5824 or nstrade@mcw.edu to assist with your tax-deductible donation. Thank you again for supporting the CVC!

- Bruce Smith
Cullen Family Runs for Heart Health and Research

MCW Magazine—On a brisk but relatively seasonal day in February 2017, hundreds of people gather a few miles northwest of the Medical College of Wisconsin (MCW) to honor the life of a former Milwaukee alderman and to raise money for the MCW Cardiovascular Center (CVC). But they're not at a traditional fundraising venue—inside a ballroom and safe from the harsh Wisconsin winter temperatures. Rather, they're outside in scenic Underwood Park, ready to participate in the annual Steve Cullen Healthy Heart Club Run/Walk.

"Steve was a runner, so there are things about our event that have to be a certain way," says Gael Cullen, Steve's widow. "We must offer the long-sleeve running shirt, and we have to offer a longer length, so in addition to the two-mile fun run/walk, there is an 8K, which is almost five miles—a minimum distance for Steve. And the course we run is one that he ran countless times."

Before his death due to heart disease in 1995, Steve Cullen was an avid runner. To honor his memory, his wife, Gael Cullen, and her family established the annual Steve Cullen Healthy Heart Club Run/Walk, with proceeds going to cardiovascular research at MCW.

Now in its 21st year, the Steve Cullen Healthy Heart Club Run/Walk has raised more than $400,000 for heart disease research and awareness, including more than $380,000 donated to the CVC since MCW began partnering with the Cullen family for the event in 2004.

The concept for the run began January 5, 1996, on what would have been Steve's 41st birthday. Just months prior, and only three days after finishing a marathon, Steve left Milwaukee on a business trip and never came home. He died in his hotel room of a sudden cardiac arrhythmia. While he had a family history of heart disease—he father died of a heart attack at age 41—Steve's cardiac arrest wasn't due to any artery blockage, but rather a malfunction of his heart's electrical system.

"His death was totally out of the blue," Gael says.

So in memory of Steve on his birthday, Gael, their four young daughters, family and friends gathered that day to take a run around the neighborhood. That could have been the beginning and end of it, but instead, Steve's younger brother, David, had an idea.

"After we got done, David said to me, "We should try to do this again next year, invite some friends and see if we can raise some money,"" Gael recalls. "So we did, and that first year, I was flabbergasted when 167 people showed up in the cold of winter in Milwaukee to run in Steve's honor."

The Steve Cullen Healthy Heart Club Run/Walk has grown in size since 1997. Now, the event averages about 700 registrants year after year.

"I've been doing the run for 21 years now, and you think my awe of our participants would wear off, but it never does," Gael remarks. (pictured right)

"I'm just so impressed that so many people come out and support this cause because it means so much not only to my family but to virtually every other family on the planet. Heart disease is so rampant that it affects everybody to some degree or another."

Unfortunately for the Cullen family, the tragic impact of heart disease didn't end with Steve. His two older brothers also died after suffering heart attacks, one at the age of 51 and the other at 53.

"I have four daughters and two grandsons who have a family history of heart disease," Gael notes. "So the idea of supporting research that can look into cardiac-related disease is very important."

And they've been successful so far, according to Ivor J. Benjamin MD, MCW professor of medicine and director of the CVC. "Gael Cullen and
her family have been tremendous partners with the CVC," he says. "They are truly the epitome of turning a tragic situation – losing Steve Cullen to premature heart disease – into surrounding themselves with friends and family to help fund research to advance promising new treatments for others who suffer from cardiovascular disease."

With the help of MCW, Gael and her family have been able to direct the funds raised through the Cullen Run/Walk. The money has supported research projects to identify genetic risk factors of heart disease, helped underwrite a medical history project to provide insights into cardiovascular risk factors and backed stem cell research with promising impact on heart disease treatment.

While all the research has been fascinating to Gael, some studies have more significance to her personally. "I particularly have a soft spot for projects that are looking at genetic research into heart disease, because obviously there is something in my husband's genes to make it such a huge issue for his family," she says.

By 2015, the event had grown sufficiently to establish an annual $25,000 award for the Steve Cullen Healthy Heart Scholar – an MCW junior or mid-career scientist involved in cardiovascular research.

The first recipient was Aron Geurts, PhD, associate professor of physiology, whose lab pioneers and applies cutting-edge genetic engineering technologies in stem cells and whole animals to model human cardiovascular diseases.

"A year after receiving the award, Dr. Geurts gave our committee a tour of his lab and talked about all the work he had done with the Cullen grant," Gael says. "That was so nice for the committee, which plans and spends so much time organizing this event, to actually see the person who got the big award and have him explain what he used it for and show the little beating heart cells in a Petri dish. It was very cool."

"I was honored to be the inaugural recipient of the award," Dr. Geurts remarks. "And I am quite pleased with the results of the funding. A postdoctoral fellow in my lab used the award to develop a novel strategy to accelerate the production of disease models using human stem cells, an advancement which we have since been able to leverage into other exciting opportunities."

In 2016, the family bestowed the second Steve Cullen Healthy Heart Scholar award on Peter C. Frommelt, MD, professor of pediatrics (cardiology), and began a three-year commitment to support the Cullen Summer Research Fellowship for Medical Students.

"We're encouraging up-and-coming researchers who might find the next genetic marker of cardiovascular disease or who might find a cure for some aspect of heart disease," Gael says. "We certainly want to help current research, but it's always important to also support those who hopefully will be our future."

Even though the Cullen Run/Walk has grown so much over the years, it still remains a Cullen family affair. Gael and Steve's four daughters are all actively involved (including three serving as committee members), as are Steve's surviving siblings, David, Cindy Barton and Dorothy Logemann. They've also gained an MCW family.

"MCW's active involvement at the run has been getting bigger year after year," Gael says, "and I only hope that will continue."

"The Cullen family has become one of the CVC's family members," Dr. Benjamin shares, "and with their continued support, we will continue our innovative research to improve cardiovascular health and reduce deaths from cardiovascular disease in southeast Wisconsin and beyond."

As the funds from this past February's run are disseminated, including $25,000 to the most recent Steve Cullen Healthy Heart Scholar, Andrew S. Greene, PhD, interim vice chair, chief and professor in the department of biomedical engineering, Gael Cullen can't help but reflect on another successful year.

"It's very gratifying to see so many people come out and support their own heart health by participating but also support the cause in the donations they raise and the dollar amount they give in the registration," she says. "This is a winter run, so we have people come out in temperatures that for a few years have been below zero with the wind chill. We've had some snow; we've had rain.

To have people come out year after year after year to support this, it's – purposefully to include a pun – very, very heartwarming."
Cardiovascular Center Seminar Series

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Medical College of Wisconsin Cardiovascular Center

Stay up to date on what’s happening in the CVC, in the Medical College, and in the News!

Cardiovascular Center Events

- **September 22**  
  Postdoc Appreciation Reception  
  *RSVP appreciated—etheriault@mcw.edu*

- **October 11th**  
  Celebrating Team Science  
  CVC Research Symposium  
  MCW Alumni Center

- **October 10-11th**  
  External Scientific Advisory Board Visit

- **October 25th, November 1, 8, and 15th**  
  Conversations with Scientists
Vision

The Cardiovascular Center at the Medical College of Wisconsin aims to become the premier integrated basic and translational academic organization in the United States.

Mission

To improve cardiovascular health in Southeast Wisconsin and beyond through cutting-edge research, cost-efficient and high-quality healthcare delivery, rigorous training of the next generation of cardiovascular scientists, and engaging the community to eliminate disparities in health outcomes.

Credits

Content, Layout
Allison DeVan, PhD
Academic Program & Research Consultant
Cardiovascular Center

Philanthropy
Natalie Strade
Tatjana Chenoweth
Office of Development

Content, Layout
Erin Theriault, MS
Research Program Coordinator III
Cardiovascular Center

Editing
Anthony Braza
Communications Consultant
Office of Communications

Content, Layout
Abigail Stein
Administrative Assistant Sr.
Cardiovascular Center

For questions or additional information please contact the CVC at cvc@mcw.edu