ABOUT THE MINNEAPOLIS HEART INSTITUTE FOUNDATION®

The Minneapolis Heart Institute Foundation (MHIF) strives to create a world without heart and vascular disease. To achieve this bold vision, it is dedicated to improving the cardiovascular health of individuals and communities through innovative research and education.

Scientific Innovation and Research – MHIF is a recognized research leader in the broadest range of cardiovascular medicine and population health initiatives. Each year MHIF leads more than 175 active research projects and publishes more than 175 peer-reviewed articles and abstracts. Cardiologists, hospitals and communities around the world adopt MHIF protocols, improving care and saving lives.

Education and Outreach – MHIF provides more than 10,000 hours of education each year to healthcare professionals. And, MHIF leads cutting-edge, transformative population health research to connect, engage, inform and empower individuals and communities to improve their health.

YEAR IN REVIEW

Minneapolis Heart Institute Foundation® Research and Education Activities in 2016

219 Institutional Review Board (IRB) approved studies

115 industry-sponsored clinical trials

104 physician-initiated studies

2000+ patients enrolled in studies

125+ manuscripts published about MHIF research

50+ poster and oral presentations at national conferences

13 interns completed the 2016 MHIF Internship Program, bringing the alumni total to 171 since 2002

ABOUT THE MINNEAPOLIS HEART INSTITUTE FOUNDATION®
The Minneapolis Heart Institute Foundation (MHIF) strives to create a world without heart and vascular disease. To achieve this bold vision, it is dedicated to improving the cardiovascular health of individuals and communities through innovative research and education.

Scientific Innovation and Research – MHIF is a recognized research leader in the broadest range of cardiovascular medicine and population health initiatives. Each year MHIF leads more than 175 active research projects and publishes more than 175 peer-reviewed articles and abstracts. Cardiologists, hospitals and communities around the world adopt MHIF protocols, improving care and saving lives.

Education and Outreach – MHIF provides more than 10,000 hours of education each year to healthcare professionals. And, MHIF leads cutting-edge, transformative population health research to connect, engage, inform and empower individuals and communities to improve their health.

There is much to celebrate in 2016, including life-changing stories, thanks to all of you – our donors, research participants, physician partners, industry partners, volunteers, friends and colleagues! Throughout this report are stories of inspiration and progress at the Minneapolis Heart Institute Foundation® (MHIF) through our strong and symbiotic partnership with the physicians at the Minneapolis Heart Institute®.

We are proud of our launch of the MHIF Valve Science Center and what it means for patients and their families to receive care and treatment options from some of the best in valvular medicine in the country, made possible because of the research done through the Foundation. This is a model of what we strive to do through our commitment to research and education. We have plans to leverage this model across other areas of expertise as we pursue innovation and identify best-in-class care for patients.

We honor the work of our physician and research partners on important clinical studies in 2016 that advanced patient care and outcomes. MHIF pursued 219 clinical trials, including 104 investigator-initiated studies, which are inspired, designed and led by physicians to answer important clinical questions that come up as they care for patients every day. The ability to support this research is what has led to protocols that define the best care pathway for patients.

We are grateful for our generous donors who help raise awareness and funding that make the work of MHIF possible. We share with you the story of the Riebe family who lost a loving husband and father to a genetic heart condition. This young family perseveres with a commitment to raising awareness of genetic heart conditions and funding research that benefits others.

We highlight milestones in our population health program – Hearts Beat Back®: The Heart of New Ulm Project, which was featured in a documentary showing the real impact when a community focuses on healthy living. We also share the impact of our unique research internship program on the experience and career of one of our own interns.

As we feature milestones, we hope our strong commitment to both research AND education is clear. Research drives advances in care and outcomes for patients and education ensures the findings have more than a local impact – reaching national and global exposure. In 2016, MHIF research was featured in more than 125 manuscripts and 50 poster and oral presentations at national conferences.

Thank you for all you do to support MHIF. Together, we continue our pursuit of a world without heart and vascular disease.

Kristine Fortman, PhD
Chief Executive Officer
Minneapolis Heart Institute Foundation

Scott Sharkey, MD
President and Chief Medical Officer
Minneapolis Heart Institute Foundation
Valvular Heart Disease – A Public Health Crisis

Valvular heart disease (VHD) is characterized by damage or a defect in one of the four valves in the heart. VHD is often associated with aging and many patients undergo “watchful waiting.” Unfortunately, as VHD progresses many patients become too sick for a traditional interventional procedure to either repair or replace the affected valve. In the United States alone, there are 3.2 million people affected, and 5.6 million people will be affected by 2030.

Minneapolis Heart Institute Foundation® (MHIF) Response

MHIF, in partnership with the Minneapolis Heart Institute® at Abbott Northwestern Hospital, is a leader in understanding valve disease, innovating therapies and identifying best-in-class care model solutions.

In 2016, MHIF formally established its Valve Science Center, with a mission to eliminate the morbidity and mortality of VHD. The launch of the Center was officially celebrated at the annual MHIF Heartbeat Gala in October 2016.

The Center is a leading institution in the latest treatment approaches, including transcatheter procedures, as well as mitral valve replacement and repair options. MHIF actively participates in major clinical trials and conducts investigator-initiated research studies focused on understanding the disease and applying new treatment, diagnosis or monitoring methods.

The Center is fully supported by funding from MHIF and focuses on translating research findings about VHD, implementing what is learned into routine clinical practice and widely sharing the information nationally and globally. MHIF’s valve team has authored hundreds of papers and presents frequently at conferences such as American Heart Association and Transcatheter Cardiovascular Therapeutics. MHIF published seven abstracts and gave six podium presentations about valve research, including two physicians participating as panelists or co-chairs of the sessions at the 2016 ACC meeting.

"THE SURVIVAL OF THIS DISEASE IS WORSE THAN MOST CANCER, THOUGH THERE ARE THERAPIES AVAILABLE TODAY THAT CAN BE LIFE-SAVING. I’M PROUD TO LEAD A VALVE SCIENCE CENTER THAT IS DEDICATED TO PURSUING A COMPREHENSIVE UNDERSTANDING OF THE BARRIERS TO CARE AND WORKING TO RAISE AWARENESS OF THE DISEASE AND AVAILABLE TREATMENTS.”

Paul Sorajja, MD, Director of the Valve Science Center at MHIF

The Van Tassel Society

For Robert Van Tassel, MD, the mission of the Minneapolis Heart Institute Foundation® (MHIF) has been a personal commitment since the early days of his career. Dr. Van Tassel is one of the founders of the Minneapolis Heart Institute® at Abbott Northwestern Hospital. The following year, with a small group of fellow cardiologists, other physicians and community members, MHIF was created as a nonprofit to support cardiovascular research and education.

In 2016, Dr. Van Tassel and his wife Betty committed to provide a $1 million estate gift and continue to support MHIF in many ways. MHIF recently renamed its Legacy Society, the “Van Tassel Society” in honor of the Van Tassel family’s leadership and long-term support.

“Estate gifts and legacy donors are critical to organizations like MHIF because they provide stability and sustainability into the future,” said Nancy Meyer Wilson, Director of Advancement at MHIF. “We are grateful for the Van Tassel family, along with the other legacy donors, who ensure MHIF research and education will continue to benefit future generations.”

Charitable giving through legacy gifts provides funding to drive breakthroughs in cardiovascular disease research and improve care and outcomes for future patients. Looking at the impact of MHIF in its 35-year history, there continues to be great potential for MHIF research and education to help many more patients and families for years to come.

The Van Tassel Society celebrates the generous individuals who have created a lasting legacy designated to help achieve the MHIF vision by including the Foundation in their estate or financial plans.

For more information about legacy giving and how to make an impact with a charitable gift for MHIF, please visit mplsheart.org/planned-giving
**2016 MILESTONES**

**JANUARY**
Committed to ensuring that women with heart disease have the same options available to them as men, MHIF performed a clinical trial procedure with the second-generation Tendyne Bioprosthetic Mitral Valve (Abbott) designed for smaller hearts. In 2015, MHIF was the first in the U.S. to use the original design of this device. When Abbott modified its design to make it more viable for patients with smaller hearts (typically women), MHIF was the first to offer the treatment option to a patient who would not have been eligible for the first generation of the technology.

**MARCH**
Data show cardiovascular disease risk factors remained stable in a state where obesity was increasing, reinforcing the benefits of a community’s efforts to address healthy lifestyles. Results for the first five years of the Hearts Beat Back®: Heart of New Ulm Project were published in the *American Heart Journal*.

**APRIL**
As part of its commitment to improving women’s heart health, MHIF hosted the 2016 Howard B. Burchell Memorial Lecture focused on the emergence of nonobstructive coronary artery disease in women, with guest speaker Dr. Carl Pepine from the University of Florida. The following day, a women’s heart health event was held featuring Dr. Pepine with educational messages for the general public.

**APRIL**
FDA approved the first leadless pacemaker (Micra® from Medtronic); MHIF participated in the critical research trials leading up to the approval of this novel device.

**MAY**
MHIF became the top-enrolling site in the world for a unique study with the SensiVest, made by Sensible Medical for patients with congestive heart failure (CHF). SensiVest is worn by CHF patients once a day, for 90 seconds, to measure the amount of fluid in their lungs. The results are sent to a physician via a secure web portal, allowing them to take proactive measures, such as changing medications or dosages, before the patient requires hospitalization. The annual cost for CHF treatment in the U.S. is $30 billion, with half of that attributed to hospitalization.

**MAY**
With a passion for education and sharing data and insights, MHIF researchers made 21 presentations (including posters) at the American College of Cardiology (ACC) annual meeting in 2016. For the full year 2016, MHIF published 125+ manuscripts and made 50+ poster and oral presentations at national conferences.
JULY
There are 1 billion people worldwide with hypertension, and that number is expected to rise to 1.5 billion in a few years. MHIF was the first center in the midwest to work on a study for an investigational device from ReCor Medical that focuses on the nerves around the renal (kidney) arteries, which may be overactive in patients with hypertension. The RADIANCE-HTN clinical study involves a minimally invasive procedure that places a small, flexible catheter into the renal arteries leading to the kidneys, then delivers ultrasound energy to the tissues around the renal arteries to decrease over-activity of the nerves. The goal is to investigate whether the treatment can lead to improved blood pressure control in patients who have not been able to control blood pressure through medications.

AUGUST
The 2016 internships concluded with a presentation of posters from all interns featuring the research they supported during the program. Through 2016 there have been 171 alumni of the MHIF Internship Program. Forty-two percent of them have gone on to be physicians, 15 percent to other health professions, 24 percent are in medical school and 15 percent are currently pre-med students. In the last five years, MHIF interns have contributed to 50 presentations/posters at national scientific sessions and 43 publications in peer-reviewed journals.

JULY
MHIF hosted a Women’s Event focused on raising awareness of women’s heart health and featured bestselling author, Cheryl Strayed. This is an annual initiative to raise awareness and funds for research and education focused on heart health for women. mplsheart.org/womens-event

OCTOBER
A documentary titled, “The Story of New Ulm, A Population Health Transformation,” was released that highlights encouraging results from the Hearts Beat Back®: Heart of New Ulm Project. This is MHIF’s 10-year population health study aimed at reducing heart disease in an entire community. mhifpopulationhealth.org

NOVEMBER
MHIF became the first in the world to leverage the new Tendyne device (Abbott) for mitral annular calcification (MAC), a common degenerative process involving the mitral valve that is associated with aging and may affect healthy blood flow in the heart.

NOVEMBER
MHIF’s commitment to sharing learnings from research with the medical community includes when a study fails to show benefits. MHIF led a single-center study sponsored by the National Institutes of Health (NHLBI) utilizing FDA guidelines for Exception from Informed Consent. The data failed to show an early benefit of postconditioning with the application of brief periods of ischemia during the initial phase of reperfusion, but was as safe as the traditional method of angioplasty, which is currently used to treat patients with a heart attack. This study was designed to further investigate findings from a previously published small, nonrandomized study that demonstrated patients who underwent postconditioning had improved LV function. Forthcoming analysis of 3-month and 1-year MRIs will reveal if a late benefit of postconditioning occurs.
The Riebe Family: Carrying Forward a Passion for Research

The Riebe family knows firsthand the importance of research to better understand and treat heart and vascular disease. Greg Riebe was playing in a pond hockey tournament in January 2015 when he experienced sudden cardiac arrest and passed away at the age of 46 – he had no prior symptoms of heart disease. Greg was a loving husband and father of two young children. His family is carrying forward his passion for life in their efforts to raise awareness and funding for research that can give hope to others with cardiovascular disease.

After his death, the Riebe family learned that Greg had a condition called Arrhythmogenic Right Ventricular Dysplasia (ARVD), a genetic heart condition in which the muscle of the right ventricle is replaced by fat and fibrosis, causing abnormal heart rhythms. ARVD is estimated to affect one in 5,000 people, accounting for up to one fifth of sudden cardiac death in people under 35 years of age. Patients don’t typically know they have ARVD until they have a cardiovascular event; however, if a family history is known, appropriate monitoring and treatment can make it a treatable condition. Now that treatment can make it a treatable condition. Now that the Riebe family knows Greg’s diagnosis, his children can continue to pursue its vision of a world without heart and vascular disease.

In October 2016, the Riebe Family hosted the first annual 5K walk/run to raise awareness and funding for research into genetic arrhythmia conditions, including ARVD. A greater understanding of the diagnosis and treatment for this condition will help others like Greg. MHIF is grateful for the efforts of the Riebe family for not only raising much needed funding for cardiovascular research, but also for efforts to raise awareness of ARVD and the importance of knowing your cardiovascular family history. It is with this type of support that MHIF can continue to pursue its vision of a world without heart and vascular disease.

Lena Trager: From College Intern to Employee

“IT MEANS SO MUCH TO BE ABLE TO HONOR GREG THROUGH THIS MEANINGFUL EVENT.” — Kate Riebe

MHIF experiences instill a passion for research

As a junior at Washington University in St. Louis, Missouri, Lena Trager had never even stepped foot in Minnesota. However, when the New York native started searching for summer internships, she knew she’d found what she was looking for at the Minneapolis Heart Institute Foundation® (MHIF).

“I had an interest in cardiology and had prior shadowing experiences in cardiac surgery, and I found that so many summer internships out there are very broad in scope and not clinically based,” explained Trager. “There are really only a handful of focused clinical research internship programs like MHIF’s.”

MHIF offers one of the most robust and unique research internship opportunities available to undergraduate pre-med students and those studying in other healthcare disciplines. Working with physician and research staff mentors, interns contribute to clinical research studies and publications that impact patient care. MHIF supports the intern program as part of its commitment to education and exposes students – those who have the potential to be future leaders in healthcare – early in their career to the critical role research opportunities play in providing optimal care.

Trager “fell in love” with MHIF’s 12-week program, in which interns spend time shadowing, observing and on field trips. She worked on research involving the perioperative use of novel oral anti-coagulants for patients who were undergoing procedures to implant a cardiac rhythm management device, such as a pacemaker. She worked under the expert guidance of MHIF researchers and cardiac electrophysiologists Drs. Jay Sengupta and JoEllyn Moore, and nurse practitioner Tamara Langeberg. Her team submitted an abstract that was selected to present at the 2016 American College of Cardiology (ACC) Scientific Sessions.

“It was an amazing experience to attend the conference and network with cardiologists, fellows, residents and other students,” said Trager.

“It was so exciting to learn about unique research projects and clinical trial results, and hear from dedicated experts in the field of cardiology.”

Trager graduated in May 2016 with a degree in Classics, and was selected to return as the lead intern for the 2016 program. In her second year, she researched atrial fibrillation ablation procedures in heart failure patients and had the opportunity to present at the Heart Rhythm Society conference held in May 2017 in Chicago.

“The opportunity to attend these conferences and present at an early stage in your career is really a testament to the strength of the research internship program,” said Trager. “I’m grateful to have worked with physician mentors, Drs. Sengupta and Moore, who were extremely generous in providing enriching research experiences. Being an intern at MHIF was the best pre-med opportunity I had, and I am so thankful for MHIF’s commitment to this program.”

ABOUT THE MHIF INTERNSHIP PROGRAM

Since its inception in 2002, 171 students have completed the program, typically 13 students per year. Each intern is assigned a clinical research project under the mentorship of a physician and the corresponding clinical research professional. Interns are engaged in clinical research with tasks such as data collection, database building and organizing, patient follow-up calls, imaging studies and manuscript and abstract writing. In a typical year, interns contribute to 10+ research presentations at national scientific meetings and 10+ publications in peer-reviewed journals. To learn more visit mplsheart.org/internship.
We are grateful to those who made gifts in memory of loved ones. Names in bold are those of the deceased.

Mr. Gene Munster

We are grateful to those who made gifts in honor of family, friends, physicians and caregivers.

Honor and Memorial Gifts
The founders of the Minneapolis Heart Institute Foundation® believed that investing in innovative research was essential to improving cardiovascular health in our community, and in 1982 they pooled their resources to create MHIF. Today, we are grateful to these founders, companies and families who continue to support our mission by investing their talent and resources.

Mr. DeWalt “Pete” Ankeny Jr. and Mrs. Margaret* Ankeny
Mr. DeWalt* Ankeny Sr.
Mr. John* Andrus III
Mr. Lee “Andy” Anderson Jr.
Mr. Richard and Ms. Lollie Ames
Ames Construction, Inc.
Dr. Adrian and Mrs. Sally Almquist
Allianz Life Insurance Company
Mr. Craig Bentdahl
Mr. Glenn* and Mrs. Patricia Bergstrom
Mr. B. John Barry
Mr. Earl and Mrs. Doris Bakken
Mr. Victor and Mrs. Carolyn Elion
Dr. Robert and Mrs. Ann Emery
Ernst & Young
Mr. James and Mrs. Judy Fetterly
Fingerprint Corporation
Mr. Gary and Mrs. JoAnn Fink
First Bank National Association
Mr. James Chafoulias
Mr. Larry Hendrickson and Mr. Gary and Mrs. JoAnn Fink
Mr. James and Mrs. Judy Fetterly
Mr. Jack and Mrs. Fay Chestnut
Mr. Brian Cohen
Mr. Chris Cohen
Mr. Mike Cohen Sr.
Mr. Sidney* and Mrs. Beverly* Cohen
Community Credit
Community Health Charities Minnesota
Mrs. Marilyn Conlon
Consulting Radiologists, Ltd.
Mr. Rodney and Mrs. Judy Cooperman
Mr. David* and Mrs. Dorothy Dalquist
Dr. James Daniel and Mrs. Judy McMahon
Col. Thomas* and Mrs. Frances* Davis
Mr. John* and Mrs. Rita Lamourex
Mr. Arthur* and Mrs. Emma Jean* Kydd
Mr. Ken* and Mrs. Barbara Lindquist
Mr. Robert* McGarvey Jr.
Mr. Todd and Ms. Trish McElroy
Mr. Nick McElroy
Mr. Dennis and Mrs. Gail Mathisen
Mr. Bob Marz
Mr. Paul Marshall
Mr. Ken* and Mrs. Barbara Longe
Mr. Dale and Mrs. Randy Lindquist
Dr. William and Mrs. Jo Ann Lindsay
Dr. Terrence and Mrs. Barbara Longe
Mr. Thomas Lowe Sr. and Mrs. Mari Lowe
Mr. Donald* and Mrs. Diana Lukcer
Russell T. Lund Charitable Trust
Mr. Louis* Hill
Hochest Marion Rousel, Inc.
Homes CSM Family Foundation
Mr. Gary Holmes
Ms. Mary Holmes
Hormel Foods Corporation
Horton
Mrs. Elizabeth H. Howell
Hubbard Broadcasting, Inc.
Mr. Russell and Mrs. Margaret Huffer International Dairy Queen
Mr. C. Charles Jackson*
Jackets Management Corp.
Mr. Benjamin* Jeffray and Mrs. Patricia* Jeffray
Mr. Nathan and Mrs. Nancy Janvin
Mr. Jim and Mrs. Joyce Jennings
Mr. Mike and Mrs. Sara Jennings
Mr. Joel and Dr. Elizabeth Johnson
Drs. Charles and Sally Jorgensen
Jack J. Jorgensen Charitable Trust
Dr. Lyle and Mrs. Tina Joyce
Mr. James and Mrs. Mary Jundt
Mr. Todd and Ms. Trish McElroy
Mr. Robert* McGarvey Jr. and Mrs. Sue McKee
Dr. Nancy McKinstry
Mr. Robert* McGarvey Jr.
Mr. Thomas Kellar II and Mrs. Victoria Kellar
Mr. Jerry* and Mrs. Linda Kiefer
Ms. Susan King
Ms. Susan King
Mr. Michael and Mrs. Peggy King
Mr. Joseph and Mrs. Susan King
Mr. John Klas Jr.
Mr. Linda Klas
Mr. Michael and Mrs. Sally Klaas
Mr. Robert Klas Jr. and Mrs. Linda Klas
Mr. Tony Klas* and Mrs. Susan Klaas
Mr. Jay Klas Jr. and Dr. Susan Klaas
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Robert Klas Jr.
Mr. Scott and Ms. Sheila Mitchell
Mrs. Janay Montello
Dr. Mika and Mrs. Jodi Mooney
Mr. Bruce and Mrs. Tracy Mooty
Mr. Charles Mooty
Mr. David and Mrs. Jeannine Mooty
John W. Mooty and Jane N. Mooty
Foundation Trusts
Mr. John* and Mrs. Jane* Mooty
Mr. Paul and Mrs. Jean Mooty
Mr. John and Mrs. Susan Morrison
Michael T. Mulligan
Mr. Robert and Mrs. Melissa Naegle
Mr. William and Mrs. Stephanie Naegle
Dr. Richard and Mrs. Kathleen Nelson
Mr. Effray* and Mrs. Gail Nerness
Dr. Demarest* and Mrs. Ardelle Nicoloff
Mr. Thomas* and Mrs. Mary Noble
Pamela Nolan
Mr. Stuart Nolan
Dr. William Northrup III and
Mrs. Joseph Northrup
Old Dutch Foods, Inc.
Mr. Earl B. Olson*
Mr. Vance and Mrs. Darin Opperman
Drs. John Overtton and Ann Lowey
Paper Warehouse, Inc.
Mr. Donald* and Mrs. Lucile Pearson
Dr. Wesley and Mrs. Stephanie Pedersen
Mr. Raymond Plank
Mr. Robert and Mrs. Constance Plank
Mr. Carl* Pohlad Jr. and Mrs. Elizabeth* Pohlad
Mr. Robert and Mrs. Rebecca Pohlad
Mr. Burke* and Mrs. Margaret* Porter
Ms. Joanne Potter
Dr. Marc Pritzker
Protective Insurance
Mr. Jerry* and Ms. Lilian Rau
Mr. Noel and Mrs. Angelina Rahn
Mr. Tom and Mrs. Dara Redmon
Mr. Thomas Rempler Sr. and
Mrs. Sandra Rempler
Mr. Thomas Rempler Jr. and
Mrs. Gayle Rempler
James and Chris Renier Fund of
The Minneapolis Foundation
Dr. James and Mrs. Christine Renier
Dr. Jonathan and Mrs. Trish Rogers
Mr. Harold Rotenberg
MRS. Ruthe Rotenberg
St. Jude Medical, Inc.
Mr. Hugh Schilling Sr. and
Mrs. Margaret* Schilling
Schneider (USA), Inc.
Mr. Dick and Mrs. Miki Schneidene
Richard M. and Sandra J. Schultz Family
Fund of the Saint Paul Foundation
Mr. Richard and Mrs. Maureen Schulze
Mr. James and Mrs. Connie Schweigert
Mr. Raymond* and Mrs. Maria* Schweigert
Mr. David and Mrs. Sandra Sherman
Sief Family Foundation
Mr. John and Mrs. Jane Sief
Mr. Philip and Ms. Laurie Sief
St. Investment Associates Foundation
Mr. Eugene* and Mrs. Gail Sit
Mr. Rob and Mrs. Gayle* Sit
Mr. Roger and Mrs. Michele Sit
Mr. Ronald Sit and Dr. Teresa Fong Sit
Ms. Mary A. Smith*
Maurice and Mitzie Spiegel Foundation
Phlantional Fund
Mr. Daniel Spiegler and Mrs. Marilyn Jax
Mr. Richard and Mrs. Judith Spiegler
Mr. Jack and Mrs. Elva* Spilane
Spring Lake Park Lions Club
Mr. Gary St. Marie*
Mr. Michael and Mrs. Debrah Stein
Sterling Electric
Mr. Clair* and Mrs. Gladys Strommen
Mr. Lee and Mrs. Louise Sundet
Tapemark
TCH Foundation
Mr. Bruce* and Mrs. Barbara Teland
Mr. Jon* and Mrs. Mary Thensenga
Thrivant Financial for Lutherans
Ms. Alyssa Tucker
Ms. Anna Tucker
Ms. Jeanne Tucker
UBS Financial Services Inc.
Ms. Ruth Usery
Dr. Robert and Mrs. Betty Van Tassel
Vantronic Systems, Inc.
Venture Solutions
Dr. Thomas Von Rueden
Mr. John von Steverberg
Mr. Kurt and Mrs. Jacques von Steverberg
Wallin Foundation
Mr. Bradford and Mrs. Cynthia Wallin
Mr. Winston* and Mrs. Maxine Wallin
Mr. W. Shelly and Mrs. Virginia* Walsh
Mr. Bill and Mrs. Kathleen Wanner
Frederick O.* and Mrs. Beverly Watson
Mr. Douglas and Mrs. Sharron Watson
Mr. Steve and Mary Watson
Mr. David Weiner*
Ms. Lucille* S. Wellington
Mr. Jacob and Dr. Allison Wert
Ms. Jovelyn Wert
Mr. Shadon* and Mrs. Marilyn Jean Wert
Mr. Dewey* and Mrs. Mary Kay White*
Mr. Roger* and Mrs. Shirley Wanner
Mr. Max* and Mrs. Helen* Winter
Mr. Mika* and Mrs. Penny Winton
Mr. Rufus and Mrs. Elizabeth Winton
Mr. Michael and Mrs. Judith Wright
Mr. Charles and Mrs. Julie Zelle
Mr. Lowell and Mrs. Norma Zittoff
* Noting deceased, prior to
December 31, 2016

Minneapolis Heart Institute Foundation® Legacy Society

The Minneapolis Heart Institute Foundation® (MHIF) Legacy Society consists of donors who include MHIF in their estate plans or have made a planned gift, and who have informed MHIF about their gift.

Ms. Thelma* Aaby
Mr. Howard D. Anderson
Mr. Ward and Mrs. Linda Anderson
Barbara and Siah Amajean
Mr. Ray* and Mrs. Shirley Bentdahl
Mr. Ray* and Mrs. Shirley Bentdahl
Mr. Gladyce Bergman*
Mr. Frank Brennan and
Mrs. Sylvia* Brennan
Mr. C. Richardson and
Mrs. Eleanor* Bisbicos
Mr. Conley Brooks, Sr.* and
Mrs. Mary* Brooks
Mr. Walter* Bush, Jr. and
Mrs. Kathleen Bush
Mr. Stanford* and Mrs. Elise* Church
Ms. Ellen* Dauney
Ms. Merle* Dobbs
Ms. Edna* Downing
Mr. Gerhard* Duesterhoft
Ms. Peggy Durka-Knapp
Mrs. Dorothy* A. Evings
Ms. Angela Freichs and
Mr. Burton* Goldstein
Mr. Willard* Gotz
Mr. James* Grantman
Mr. Richard* and Mrs. Marge Haag
Ms. Lynne Haynow
Ms. M. Lance* Hannon
Mr. Donald* and Mrs. Marilyn Henkel
Mr. Roy and Mrs. Kathryn Herstenback
Mr. Edward* and Mrs. Florence* Hesse
Mr. John and Mrs. Leslie* Holfkar
Ms. Eva* Holmes
Ms. Ann* Hrdlicka
Mr. C. Charles* Jackson
Mr. Lawrence* and Mrs. Joyce* Johnson
Ms. Marilyn Louise Johnson*
Mrs. Phyllis* Johnson
Mr. Thomas and Mrs. Margaret Johnson
Mrs. Vicki* Johnson
Mr. Robert* and Mrs. Patricia* Kelsey
Mr. Harold* Kecker
Mr. Jerold* R. and Mrs. Linda* Kiernan
Mr. Charles* and Mrs. Shirley* Koplon
Mrs. Charlotte* Krueger
Ms. Eleanor* D. Larson
Mr. Stuart* and Mrs. Jacqueline Lindman
Mr. Donald* and Mrs. Luela Mackdanz
Ms. Grace* Malberg
Ms. Rose* Malling
Ms. Kathryn* and Mr. Norman* McGrew
Mr. J. Donald* and Mrs. Dorothy* Meyer
Mr. Michael T. Mulligan
Mr. Donald* and Mrs. Ruth Murphy
Mr. A. Louis* and Mrs. Dorothy Neste
Mrs. Norma Neumann and
Dr. Rolf Andreassen*
Ms. Ellen* M. Olson
Mr. Gordon* Olson
Ms. Margaret* Osterberg
Mr. Alex* and Mrs. Carol* Ostrow
Ms. Janet* S. Paper
Mr. Donald* and Mrs. Lucile Pearson
Mr. Daniel F. Perschuck
Mr. Ralph* J. Peterson
Mr. Octavio and Mrs. Jody Port
Mr. Joshua* and Mrs. Jean* Premack
Mr. Henny* and Mrs. Joyce* Reget
Mr. Lester* and Mrs. Marion* Reinhardt
Mr. James and Mrs. Dianne Saftey
Dr. Wilson M. and Mrs. Barbara C. Satter
Ms. Ilene* S. Saunders
Mr. Joseph* and Mrs. Norine* Scallon
Ms. Margaret* R. Schaefer
Ms. Alyce* Scholten
Ms. Mary* Smith
Mr. John* "Jack" and Mrs. Elva* Spillane
Mr. George Stepanovitz*
Ms. Hilda* Stoetzal
Ms. Lois* Thompson
Dr. Robert and Mrs. Betty Van Tassel
Mr. Frank* B. Wallace
Mrs. Maureen Kucera-Walsh and
Mr. Michael Walsh
Mr. W. Shelly* and Mrs. Virginia* Walsh
Ms. Luckie* S. Wellington
Ms. Mattie* Westerdahl
Mr. David* and Mrs. Penny Winton

MHIF changed the name of the Legacy Society to the Van Tassel Society in 2017. New members of the Society will be listed in the 2017 MHIF Annual Report.
Minneapolis Heart Institute Foundation® Physicians and Board of Directors

Minneapolis Heart Institute® at Abbott Northwestern Hospital and Minneapolis Heart Institute Foundation Physicians

Raad H. Abdelhadi, MD
Peter B. Alden, MD
JASON D. Alexander, MD
Sad Alizadeh, MD
Judah Askev, MD
Richard Y. Bae, MD
Mossi K. Bennett, MD
John Bernhardson, MD
Emmanuel Brilakis, MD
M. Nicholas Burke, MD
Durand E. Burns, MD
Barry Cabayu, MD
Domenico Calcaterra, MD
Alex R. Campbell, MD
Domenico Calcaterra, MD
Barry Cabayu, MD
Eric Fenstad, MD
Robert S. Farivar, MD, PhD
Peter Eckman, MD
Frazier Eales, MD
Timothy G. Dirks, MD
Andrew H. Cragg, MD
Timothy G. Dirks, MD
Jason Q. Alexander, MD
Peter B. Alden, MD
Ray Bentdahl* (Emeritus)
Conley Brooks, Jr.
Daniel Beranek
Ray Bentdahl* (Emeritus)
Kevin Graham, MD (Emeritus)
Thomas J. Gunderson
Ivan Chavez, MD
Christopher T. Dahl
Craig L. Evanich
Eric Fenstad, MD
Matthew Chu, MD
Desmond B. Jay, MD
John L. Lesser, MD
Andrew H. Cragg, MD
David Lin, MD
Terrence F. Longe, MD
Frazier Eales, MD
Peter Zimbwa, MD

december 31, 2016

Message from the Chairman

Over the last year, I have seen clear evidence of the ongoing revitalization of the actions and outcomes from the team at the Minneapolis Heart Institute Foundation® (MHIF). The efforts to improve the cardiovascular health of individuals and communities through MHIF’s innovative research and education are making an impact that will benefit today’s patients as well as future generations.

I am proud to serve as Chairman of the Board for an organization that pursues such a breadth of research. With over 200 active studies annually, progress is being made in all areas of the cardiovascular system; from tiny pacemakers to Big Data, from repairing and replacing faulty heart valves to reducing the potential for stroke from carotid disease, from assessing the risk of a specific patient to monitoring an entire town’s cardiovascular risks, from stemming the tide of heart failure progression to stem cell research in damaged heart muscle, MHIF is advancing the knowledge needed to prevent and treat cardiovascular disease. And, the most notable studies done through MHIF come from the insightful questions raised by the physicians at Minneapolis Heart Institute® who care for patients every day. Their passion leads them to pursue research that answers important clinical questions, resulting in treatment protocols that can define the optimal care pathway for patients. The partnership between MHIF and MHIF® is essential to the Foundation’s mission, and in my opinion, that partnership has never been stronger.

MHIF leadership under CEO Kristine Fortman and Chief Medical Officer Scott Sharkey, is accelerating the great work of this organization, which is a jewel in the Twin Cities area. The community benefits from this great organization as patients have access to world-class medical treatment as well as the hope that comes from innovative treatment options available because of MHIF research.

I see the energy and renewed enthusiasm in many of the accomplishments over the last year, and I see a healthy long-term potential that will strengthen the MHIF impact on a local, national and global scale. I want to express my gratitude to those who contributed financially to support the MHIF mission in 2016. The accomplishments of this organization would not be possible without your help.

Thomas J. Gunderson
Chair, Minneapolis Heart Institute Foundation Board of Directors
# 2016 Statement of Operations

## REVENUE

<table>
<thead>
<tr>
<th>Source</th>
<th>Percent</th>
<th>Operating</th>
<th>Funds with Time or Purpose Restrictions</th>
<th>Endowments</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributions</td>
<td>24%</td>
<td>$2,317,270</td>
<td>$2,113,810</td>
<td>$155,621</td>
<td>$4,275,459</td>
</tr>
<tr>
<td>Grants</td>
<td>4%</td>
<td>346,087</td>
<td>447,349</td>
<td>—</td>
<td>793,436</td>
</tr>
<tr>
<td>Sublicense Revenue</td>
<td>9%</td>
<td>851,422</td>
<td>—</td>
<td>—</td>
<td>851,422</td>
</tr>
<tr>
<td>Research Study Revenues</td>
<td>34%</td>
<td>3,211,984</td>
<td>1,048</td>
<td>—</td>
<td>3,213,932</td>
</tr>
<tr>
<td>Investment Gain</td>
<td>0%</td>
<td>184</td>
<td>227,872</td>
<td>1,065,311</td>
<td>1,293,367</td>
</tr>
<tr>
<td>Net Assets Released from Restrictions</td>
<td>15%</td>
<td>1,412,125</td>
<td>(1,412,125)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net Assets Released – Endowment Earnings</td>
<td>9%</td>
<td>861,799</td>
<td>(135,864)</td>
<td>(725,935)</td>
<td>—</td>
</tr>
<tr>
<td>Other Revenue</td>
<td>5%</td>
<td>596,397</td>
<td>(257,251)</td>
<td>—</td>
<td>249,046</td>
</tr>
<tr>
<td><strong>Total Support and Revenues</strong></td>
<td></td>
<td>$9,507,268</td>
<td>$985,639</td>
<td>$183,755</td>
<td>$10,676,662</td>
</tr>
</tbody>
</table>

## EXPENSES

### PROGRAM SERVICES

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent</th>
<th>Operating</th>
<th>Funds with Time or Purpose Restrictions</th>
<th>Endowments</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>13%</td>
<td>$1,279,584</td>
<td>—</td>
<td>—</td>
<td>$1,279,584</td>
</tr>
<tr>
<td>Research</td>
<td>51%</td>
<td>4,968,611</td>
<td>—</td>
<td>—</td>
<td>4,968,611</td>
</tr>
<tr>
<td><strong>Total Program Services</strong></td>
<td></td>
<td>$6,248,195</td>
<td>—</td>
<td>—</td>
<td>$6,248,195</td>
</tr>
</tbody>
</table>

### SUPPORTING SERVICES

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent</th>
<th>Operating</th>
<th>Funds with Time or Purpose Restrictions</th>
<th>Endowments</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>26%</td>
<td>2,483,678</td>
<td>—</td>
<td>—</td>
<td>2,483,678</td>
</tr>
<tr>
<td>Fundraising</td>
<td>10%</td>
<td>969,741</td>
<td>—</td>
<td>—</td>
<td>969,741</td>
</tr>
<tr>
<td><strong>Total Supporting Services</strong></td>
<td></td>
<td>3,453,419</td>
<td>—</td>
<td>—</td>
<td>3,453,419</td>
</tr>
</tbody>
</table>

## Total Expenses

| Total Expenses | $9,701,614 | $985,639 | $183,755 | $975,048 |

## Change in Net Assets

| Change in Net Assets | ($194,346) | $985,639 | $183,755 | $795,048 |

## ASSETS

### CASH AND CASH EQUIVALENTS

- **Cash and Cash Equivalents**: $1,288,583

### INVESTMENTS

- **Investments**: $20,803,166

### RECEIVABLES

- **Contributions Receivable**: $1,660,416
- **Pledges Receivable (net)**: $1,380,691
- **Other Receivables (net)**: $1,505,698

### OTHER ASSETS

- **Other Assets**: $58,646

### FIXED ASSETS

- **Fixed Assets (net)**: $113,390

### Total Assets

- **Total Assets**: $26,810,593

## LIABILITIES

### CURRENT LIABILITIES

- **Accounts Payable**: $306,831
- **Accrued Payroll Costs**: $494,387
- **Accrued Pension**: $369,262
- **Other Accrued Expenses**: $312,714
- **Deferred Rent**: $84,055
- **Deferred Revenue**: $36,126

### Total Liabilities

- **Total Liabilities**: $1,603,374

## NET ASSETS

### UNRESTRICTED

- **Unrestricted**: $4,859,333

### TEMPORARILY RESTRICTED

- **Temporarily Restricted**: $4,169,333

### PERMANENTLY RESTRICTED

- **Permanently Restricted**: $16,284,593

### Total Net Assets

- **Total Net Assets**: $25,207,219

### Total Liabilities and Net Assets

- **Total Liabilities and Net Assets**: $26,810,593

The Minneapolis Heart Institute Foundation is a proud member of Community Health Charities Minnesota, an alliance of 40 leading nonprofit health research and service organizations working to improve lives affected by chronic illness by investing in health research, services and education.