CIRCULATORY FAILURE PROGRAM
Margaret M. Redfield MD, Director

Cardiac Amyloid Clinic
Evaluates patients with all types of proven or suspected cardiac amyloidosis, most commonly AL, wild-type TTR (senile systemic amyloidosis) or familial TTR amyloidosis.

Martha Grogan MD, Director
Omar F. Abou Ezzeddine MD MS
Barry A. Boilson MD
Daniel D. Borgeson MD
Alfredo L. Clavell MD
Barry L. Karon MD
Kyle W. Klarich MD
Grace Lin MD
Wayne L. Miller MD PhD
Margaret M. Redfield MD
Richard J. Rodeheffer MD
Janell Grazzini Frantz APRN MSN CNP

Heart Failure Clinic
Specializes in diagnosis and chronic management of heart failure patients with reduced or preserved ejection fraction, eligibility for cardiac replacement or mechanical circulatory support, or novel therapeutics for heart failure.

Grace Lin MD, Director
Omar F. Abou Ezzeddine MD MS
Barry A. Boilson MD
Daniel D. Borgeson MD
Barry A. Borlaug MD
Horm H. Chen MD
Alfredo L. Clavell MD
Shannon M. Dunlay MD
Brooks S. Edwards MD
Robert P. Frantz MD
Shudhir S. Kushwaha MD
Naveen L. Pereira MD
Richard J. Rodeheffer MD
John A. Schirger MD
Jean A. Wagner APRN CNP

Left Ventricular Assist Device Clinic
Assesses and evaluates patients for mechanical circulatory support, either as bridge to transplantation or destination therapy, with subsequent follow-up of the patient post implantation.

Cardiology
Alfredo L. Clavell MD, Director
Atta Behfar MD PhD
Barry A. Boilson MD
Shannon M. Dunlay MD
Brooks S. Edwards MD
Robert P. Frantz MD
Shudhir S. Kushwaha MD
Naveen L. Pereira MD
Richard J. Rodeheffer MD
John A. Schirger MD
Jean A. Wagner APRN CNP

Pulmonary Hypertension Clinic
Provides skilled diagnosis, individual treatment plans and thorough follow-up care in patients with pulmonary arterial hypertension.

Robert P. Frantz MD, Director

Cardiology
Garvan C. Kane MD PhD
Sudhir S. Kushwaha MD
Robert B. McCully MD
Joseph G. Murphy MD

Pulmonology
Hilary M. DuBrock MD
Michael J. Krowka MD

Unexplained Dyspnea Clinic
Evaluates patients with not-otherwise-specified shortness of breath, edema, right heart failure, exercise intolerance, or deconditioning.

Robert P. Frantz MD, Director
Daniel D. Borgeson MD
Barry A. Borlaug MD
Garvan C. Kane MD PhD
Barry L. Karon MD
Michael J. Krowka MD
Sudhir S. Kushwaha MD
Grace Lin MD
Wayne L. Miller MD PhD

HEART RHYTHM SERVICES
Thomas Munger MD, Director

Heart Rhythm Clinic
Specializes in treatment of arrhythmias and congenital heart disease, new generation drugs and devices for prevention of stroke, including intracardiac and epicardial left atrial appendage occlusion, and remote monitoring of arrhythmias.

Margaret A. Lloyd MD MBA, Director
Samuel J. Asirvatham MD
Barry A. Boilson MD
David J. Bradley MD PhD
Yong-Mei Cha MD
Freddy Del-Carpio Munoz, MD*
Abhishek J. Deshmukh MBBS
Raul E. Espinosa MD
Paul A. Friedman MD
Bernard J. Gersh MB ChB DPhil
Suraj Kapa MD
Ammar Killu MBBS
Hon-Chi Lee MD
Malini Madhavan MBBS
Siva K. Mulpuru MD
Thomas M. Munger, MD
Peter A. Noseworthy MD
Michael J. Osborn MD
Douglas L. Packer MD
Robert F. Rea MD
Lisa M. Belch APRN MSN CNP
Sarah M. Benak MSN RN CNP
Randall A. Hirn PA-C
Jill M. Olmscheid APRN CNP
Amy M. Stier APRN MSN CNP

Long QT Syndrome/Genetic Heart Disorders Clinic

Offers diagnosis and treatment of Long QT Syndrome and other genetic heart disorders, as well as genetic testing, education and counseling for patients and family members.

Michael J. Ackerman MD PhD, Director
Katy M. Bos APRN CNS MS

Electrophysiology Laboratory

Samuel J. Asirvatham MD, Director
David J. Bradley MD PhD
Yong-Mei Cha MD
Freddy Del-Carpio Munoz MD*
Abhishek J. Deshmukh MBBS
Paul A. Friedman MD
Suraj Kapa MD
Ammar Killu MBBS
Malini Madhavan MBBS
Siva K. Mulpuru MD
Thomas M. Munger MD
Peter A. Noseworthy MD
Robert F. Rea MD

Implantable Device Laboratory

Yong-Mei Cha MD, Director
Samuel J. Asirvatham MD
David J. Bradley MD PhD
Abhishek J. Deshmukh MBBS
Paul A. Friedman MD
Hon-Chi Lee MD
Malini Madhavan MBBS
Siva K. Mulpuru MD
Robert F. Rea MD

Pediatric Electrophysiology Laboratory/Device Implant Laboratory

Bryan C. Cannon MD, Director
Philip L. Wackel MD

Heart Rhythm and Physiological Monitoring Laboratory

Peter A. Noseworthy MD, Director

Adult
Crystal R. Bonnichsen MD
Abhishek J. Deshmukh MBBS
Titus C. Evans Jr MD
Joerg Herrmann MD
Allan S. Jaffe MD
Grace Lin MD
Wayne L. Miller MD PhD
Siva K. Mulpuru MD
Michael J. Osborn MD
Robert F. Rea MD
Farris K. Timimi MD
R. Scott Wright MD

Pediatric
Allison Cabalka MD
Bryan C. Cannon MD
Frank Cetta MD
Ben W. Eiden MD
Jonathan N. Johnson MD
Patrick W. O'Leary MD
Nathan W. Taggart MD
Philip L. Wackel MD

ISCHEMIC HEART DISEASE PROGRAM

Malcolm R. Bell MD, Director

Chest Pain and Coronary Physiology Clinic

Treats patients with challenging chest pain syndromes, including undiagnosed, complex, or unresolved conditions, including patients with angina who cannot be treated with standard approaches.

Amir Lerman MD, Director
Gregory W. Barsness MD
Patricia J. M. Best MD
Barry A. Borlaug MD
John F. Bresnahan MD
Charles R. Cагin DO*
Mackram F. Eleid MD
Kenneth A. Fetterly PhD
Robert P. Frantz MD
Rajiv Gulati MD PhD
Joerg Herrmann MD
David R. Holmes Jr MD
Andre C. Lapeyre III MD
Amir Lerman MD
Rick A. Nishimura MD
D. Fearghas O'Cochlain MD*
Krishna M. Pamulapati MD*
Abhiram Prasad MD
Guy S. Reeder MD
Charanjit S. Rihal MD MBA
Gurpreet S. Sandhu MD PhD
Mandeep Singh MD MPH
Ripudamanjit Singh MD*
R. Thomas Tilbury MD

Coronary Artery Disease Clinic

Provides rapid access for patients needing cardiac catheterization and improves continuity of care.

John F. Bresnahan MD, Director
Gregory W. Barsness MD
Atta Behfar MD PhD
Malcolm R. Bell MD
Patricia J. M. Best MD
Barry A. Borlaug MD
Robert P. Frantz MD
Rajiv Gulati MD PhD
Joerg Herrmann MD
David R. Holmes Jr MD
Andre C. Lapeyre III MD
Amir Lerman MD
Abhiram Prasad MD
Guy S. Reeder MD
Gurpreet S. Sandhu MD PhD
Mandeep Singh MD MPH
R. Thomas Tilbury MD

*Mayo Clinic Health System
Structural Interventional Cardiology
Malcom R. Bell MD
Patricia J. M. Best MD
John F. Bresnahan MD
Mackram F. Eleid MD
Rajiv Gulati MD PhD
David R. Holmes Jr MD
Guy S. Reeder MD
Charanjit S. Rihal MD MBA
Gurpreet S. Sandhu MD PhD
Mandeep Singh MD

Invasive Hemodynamics and Physiology
Atta Behfar MD PhD
Barry A. Borlaug MD
Mackram F. Eleid MD
Robert P. Frantz MD
Joerg Herrmann MD
Andre C. Lapayre III MD
Amir Lerman MD
Rick A. Nishimura MD

Intracoronary Imaging and Physiology
Gregory W. Barsness MD
Malcolm R. Bell MD
Patricia J. M. Best MD
John F. Bresnahan MD
Rajiv Gulati MD PhD
Gurpreet S. Sandhu MD PhD
Mandeep Singh MD MPH

Endovascular Interventional Cardiology
Gregory W. Barsness MD
John F. Bresnahan MD
Rajiv Gulati MD PhD
David R. Holmes Jr MD

Congenital Interventional Cardiology
Jason H. Anderson MD
Allison K. Cabalka MD
Frank Cetta MD
Donald J. Hagler MD
Nathaniel W. Taggart MD

Cardiac Intensive Care Unit
Gregory W. Barsness MD, Director
Nandan S. Anavekar MB BCh
Malcolm R. Bell MD
Courtney E. Bennett DO
Patricia J. M. Best MD
Bernard J. Gersh MB ChB DPhil
Joerg Herrmann MD
Allan S. Jaffe MD
Jacob C. Jentzer MD
Andre C. Lapayre III MD
Sunil V. Mankad MD
Joseph G. Murphy MD
Jae K. Oh MD
Guy S. Reeder MD
Lawrence J. Sinak MD
R. Thomas Tilbury MD

Brandon M. Wiley MD
R. Scott Wright MD

PREVENTIVE CARDIOLOGY PROGRAM
Francisco Lopez-Jimenez MD, Director

Cardiovascular Health Clinic
Offers both risk assessment and risk reduction services for patients of all ages at risk for heart disease or those who have already developed heart disease.

Francisco Lopez-Jimenez MD, Director
Thomas G. Allison PhD MPH
Adelaide M. Arruda-Olson MD PhD
Frank V. Brozovich MD PhD
LaPrincess C. Brewer MD MPH
Thomas C. Gerber MD PhD
Bruce D. Johnson PhD
Birgit Kantor MD
Stephen L. Kopecky MD
Iftikhar J. Kullo MD
Thomas P. Olson PhD
Virend Somers MD PhD
Ray W. Squires PhD
Carmen M. Terzic MD PhD
Randal J. Thomas MD
Hector R. Villarraga MD
Kari A. Dessner APRN CNP
Alicia A. Mickow APRN MSN CNP

Cardiac Rehabilitation Program
Offers a multidisciplinary, individualized treatment program designed to help patients recover from heart disease.

Randal J. Thomas MD, Director
Carmen M. Terzic MD PhD, Associate Director
Ray W. Squires PhD, Program Director
Stephen L. Kopecky MD
Francisco Lopez-Jimenez MD

Cardio-Oncology Clinic
Specializes in integrative management for cancer patients with cardiovascular risks or injury.

Joerg Herrmann MD, Director
Amir Lerman MD
Grace Lin MD
Hector R. Villarraga MD

Cardio-Rheumatology Clinic
Addresses the needs of high-risk patients with rheumatic conditions such as lupus and rheumatoid arthritis whom have increased risk of cardiovascular disease and cardiovascular mortality.

Rekha Mankad MD, Director
Patricia J. M. Best MD
Lori A. Blauwet MD
Sharonne N. Hayes MD

Early Atherosclerosis Clinic
Provides comprehensive diagnoses and treatment for patients at risk of early atherosclerosis, asymptomatic patients who have a family history of early atherosclerosis, and for patients with abnormal levels of novel risk factors.

Iftikhar J. Kullo MD, Director
Stephen L. Kopecky MD
Francisco Lopez-Jimenez MD
Robert D. McBane MD
Randal J. Thomas MD

Sports Cardiology Clinic
Specializes in advising high-performance athletes on safe training and exercise programs, and for patients who have cardiac symptoms during exercise or known cardiac diagnosis who wish to safely exercise.

Thomas G. Allison PhD MPH, Program Director
Todd D. Miller MD, Medical Director
Michael J. Ackerman MD PhD
Alfredo L. Clavell MD
Bernard J. Gersh MB ChB DPhil
Kyle W. Klarich MD
Sudhir S. Kushwa MD
Wayne L. Miller MD PhD
Steve R. Ommen MD
Peter A. Noseworthy MD
Robert F. Rea MD

Statin Intolerance Service
Provides expert diagnoses, risk stratification, and treatment of patients with statin-associated side effects.

Stephen L. Kopecky MD, Director
Thomas G. Allison PhD MPH
Frank V. Brozovich MD PhD
Bruce D. Johnson PhD
Birgit Kantor MD
Iftikhar J. Kullo MD
Francisco Lopez-Jimenez MD
Thomas P. Olson PhD
Virend Somers MD PhD
Ray W. Squires PhD
Carmen M. Terzic MD PhD
Randal J. Thomas MD
Hector R. Villarraga MD

Women’s Heart Clinic
Offers risk assessment, heart evaluation and comprehensive treatment to meet the unique needs of women at risk for or diagnosed with cardiovascular disease.

Rekha Mankad MD, Director
Patricia J. M. Best MD
Sharonne N. Hayes MD
Birgit Kantor MD
Marysia S. Tweet MD
Kari A. Dessner APRN CNP
STRUCTURAL HEART DISEASE PROGRAM
Rick A. Nishimura MD, Director

Adult Congenital Heart Disease Clinic
Specializes in diagnosis, treatment, and continuity of care throughout a congenital heart patient’s lifespan, including expert diagnoses and treatment plans, from pregnancy to heart surgery.

Cardiology
Heidi M. Connolly MD, Medical Director
Naser M. Ammash MD
Crystal R. Bonnichsen MD
Frank Cetta MD
Alexander C. Egbe MBBS
Martha Grogan MD
Carole A. Warnes MD
Krista M. Burke APRN MSN CNP

Cardiovascular Surgery
Joseph A. Dearani MD, Surgical Director
M. Sertac Cicek MD
Alberto Pochettino MD
Hartzell V. Schaff MD

Heart Brain Clinic
Evaluates and manages patients with patent foramen ovale or atrial fibrillation, and who have had a stroke or transient ischemic attack.

Naser M. Ammash MD, Director, Cardiology
Robert D. Brown Jr MD MPH, Director, Neurology

Cardiology
Naser M. Ammash MD
Paul A. Friedman MD
David R. Holmes Jr MD
Thomas M. Munger MD
Abhiram Prasad MD
Guy S. Reeder MD

Neurology
Robert D. Brown Jr MD
Bruce A. Evans MD
Kelly D. Flemming MD
Jimmy R. Fulgham MD
James P. Klaas MD
Jonathan Graff Radford MD
Irene Meissner MD
George W. Petty MD
Alejandro A. Rabinstein MD
Lindsey N. Williams MD

Hypertrophic Cardiomyopathy Clinic
Addresses highly individualized treatment needs, and offers medical management, as well as expert surgical treatment, including septal myectomy, septal ablation, and ICD implantation.

Steve R. Ommen MD, Director

Adult Cardiology
Bernard J. Gersh MB ChB DPhil
Jeffrey B. Geske MD
Kyle W. Klarich MD
Darrell (Brian) B. Newman MD*
Rick A. Nishimura MD

Pediatric Cardiology
Michael J. Ackerman MD PhD
Bryan C. Cannon MD
Frank Cetta MD
David J. Driscoll MD
Ben W. Eide MD
Jonathan Johnson MD
Patrick W. O’Leary MD
Nathaniel W. Taggart MD
Phil L. Wackel MD

Cardiovascular Surgery
Joseph A. Dearani MD
Hartzell V. Schaff MD

Marfan Syndrome and Thoracic Aorta Clinic
Offers an integrated medical, genetic, and surgical team approach with specialized testing for diagnosis and medical/surgical treatment of Marfan syndrome and associated symptoms.

Juan M. Bowen MD, Medical Director
Alberto Pochettino MD, Surgical Director

Adult Cardiology
Naser M. Ammash MD
Nandan S. Anavekar MB BCh
Crystal R. Bonnichsen MD
Heidi M. Connolly MD
Raul E. Espinosa MD
Iftikhar J. Kullo MD
Andrew G. Moore MD*

Pediatric Cardiology
Jason H. Anderson MD
Allison K. Cabalka MD
Frank Cetta MD
Ben W. Eide MD
Jonathan N. Johnson MD
Patrick W. O’Leary MD
Charlotte S. Van Dorn MD

Pericardial Disease Clinic
Evaluates and manages treatment for various conditions related to the pericardium, including recurrent pericarditis, pericardial effusion, constrictive pericarditis and asymptomatic pericardial cysts.

Jae K. Oh MD, Medical Director
Kevin L. Greason MD, Surgical Director

Cardiology
Nandan S. Anavekar MB BCh
Barry A. Borlaug MD
Raul E. Espinosa MD
Sharonne N. Hayes MD
Garvan C. Kane MD PhD
Rowlens M. Melduni MD

Cardiovascular Surgery
Arman Arghami MD
Gabor Bagameri MD
M. Sertac Cicek MD
Juan A. Crestanello MD
Richard C. Daly MD
Joseph A. Dearani MD
Kevin L. Greason MD
Vishal Khular MBBS
Alberto Pochettino MD
Phillip G. Rowse MD
Hartzell V. Schaff MD
John M. Stulak MD

Valvular Heart Disease Clinic
Addresses native and prosthetic valve diseases, employing advanced diagnostic testing, offers unique surgical therapies such as robotic mitral valve repair and catheter-based therapies, including transcatheter heart valves and periprosthetic leak closure devices with unparalleled results.

Vuyisile T. Nkomo MD, Director
Lori A. Blauwet MD
Mackram F. Eleid MD
Raul E. Espinosa MD
Titus C. Evans Jr MD
David A. Foley MD
Bernard J. Gersh MB ChB DPhil
Jeffrey B. Geske MD
Sushil (Allen) A. Luis MBBS
Joseph F. Maalouf MD
Rekha Mankad MD
Sunil V. Mankad MD
Hector I. Michelena MD
Joseph G. Murphy MD
Rick A. Nishimura MD
Jae K. Oh MD
Ratnasari Padang MBBS PhD
Sorin V. Pislaru MD
Guy S. Reeder MD
R. Scott Wright MD
Courtney S. Swenson APRN CNP MSN

*Mayo Clinic Health System

Visit mayoclinic.org/medicalprofs for more information | The medical professionals page offers physician-specific information including open clinical trials, upcoming CME’s, and e-newsletters covering the latest in diagnosis and treatments
GONDA VASCULAR CENTER
Haraldur Bjarnason MD, Director

Noninvasive Vascular Lab
Paul W. Wennberg MD, Director
Ana I. Casanegra MD
David A. Froehling MD
Ifikhar J. Kullo MD
Robert D. McBane MD
Thom W. Rooke MD
Roger F. Shepherd MB BCh
Raymond C. Shields MD

Thrombophilia Clinic
Provides treatment of acute thrombosis, peri-procedure management of chronically anticoagulated patients, assessment and recommendations for patients at high risk for postoperative VTE, and suspected familial or acquired thrombophilia, as well as chronic anticoagulation care.

Waldemar E. Wysokinski MD PhD, Director
Aneel A. Ashrani MD
Matthew A. Bartlett MB BCh BAO
Ana I. Casanegra MD
Paul R. Daniels MD
David A. Froehling MD
Robert D. McBane MD
Raymond C. Shields MD

Vascular Medicine Clinic
Robert D. McBane MD, Director
Ana I. Casanegra MD
Mark G. Costopoulos MD
David A. Froehling MD
Ifikhar J. Kullo MD
Ian R. McPhail MD
Thom W. Rooke MD
Roger F. J. Shepherd MB BCh
Raymond C. Shields MD
Paul W. Wennberg MD
Waldemar E. Wysokinski MD PhD

Vascular Wound Clinic
Treats patients with vascular wounds, addresses the underlying disease process, and provides management directives to optimize wound healing.

Karen L. Andrews MD, Director
Ana I. Casanegra MD
Paul L. Claus MD
Robert Haddon MD MS
Robert D. McBane MD
Ian R. McPhail MD
Raymond C. Shields MD
Waldemar E. Wysokinski MD PhD
Carol J. Bohanon APRN CNP DNP
Dalene M. Bott-Kitslaar APRN CNP
Alice J. Malecha APRN CNP MSN
Danielle T. Viazny PA-C MS

Vascular Surgery
Thomas C. Bower MD, Chair
Randall R. De Martino MD
Jill K. Colglazier MD
Manju Kalra MD
Gustavo S. Oderich MD
Fahad Shuja MBBS

Vein Clinic
Specializes in the treatment of venous diseases such as spider veins, varicose veins, and treatment of non-healing ulcers and blood clots. Interventional treatment options include sclerotherapy, phlebectomy, radiofrequency endovenous laser ablation, and laser pulsed-light treatment.

Melissa J. Neisen MD, Director
Gregory W. Barsness MD
Emily C. Bendel MD
Haraldur Bjarnason MD
Thomas C. Bower MD
Rajiv Gulati MD PhD
Jill K. Colglazier MD
Manju Kalra MBBS
Ian R. McPhail MD
Sanjay Misra MD
Newton B. Neidert MD
Gustavo S. Oderich MD
Clark C. Otley MD
Thom W. Rooke MD
Fahad Shuja MBBS
Andrew H. Stockland MD

Cardiac Stress and Imaging
J. Wells Askew III MD, Director

Cardiopulmonary Stress Laboratory
Francisco Lopez-Jimenez MD, Director
Thomas G. Allison PhD MPH
Adelaide M. Arruda-Olson MD PhD
Amanda R. Bonikowske PhD
Frank V. Brozovich MD PhD
Bruce D. Johnson PhD
Birgit Kantor MD
Stephen L. Kopecky MD
Ifikhar J. Kullo MD
Thomas P. Olson PhD
Ray W. Squires PhD
Randal J. Thomas MD
Hector R. Villarraga MD

Nuclear Cardiology Laboratory
Panithaya Charoenthaitawee MD, Director
Omar F. Abou Ezzeddine MD MS
Nandan S. Anavekar MD
J. Wells Askew III MD
Raymond J. Gibbons MD
John H. Haley MD*
Todd D. Miller MD
Martin G. Rodriguez-Porcel MD

Stress Echocardiography
Robert B. McCully MD, Director
Naser M. Ammash MD
Nandan S. Anavekar MB BCh
Adelaide M. Arruda-Olson MD PhD
J. Wells Askew III MD
Lori A. Blauwet MD
Roger L. Click MD PhD
Michael W. Cullen MD*
Raul E. Espinosa MD
Monique A. Freund MD*
John H. Haley MD*
Robert J. Houlihan MD*
Garvan C. Kane MD PhD
Kyle W. Klarich MD
Joseph F. Maalouf MD
Sunil V. Mankad MD
Rowlens M. Melduni MD
Hector I. Michelena MD
Fletcher A. Miller Jr MD
Andrew G. Moore MD*
Vuyisile T. Nkomo MD
Jae K. Oh MD
Steve R. Ommen MD
Patricia K. Pellikka MD
Tyler J. Peterson MD*
Sorin V. Pislaru MD PhD
Lawrence J. Sinak MD
Peter C. Spittell MD
Tahir Tak MD PhD*
Hector R. Villarraga MD

*Mayo Clinic Health System
ECHOCARDIOGRAPHY
LABORATORY
Patricia A. Pellikka MD, Director
Garvan C. Kane MD, Codirector
Ben W. Eidem MD, Codirector
Sorin V. Pislaru, Codirector

Naser M. Ammash MD
Nandan S. Anavekar MB BCh
Jason H. Anderson MD
Adelaide M. Arruda-Olson MD PhD
J. Wells Askew III MD
Courtney E. Bennett DO
Lori A. Blauwet MD
Crystal R. Bonnichsen MD
Daniel D. Borgeson MD
Allison K. Cabalka MD
Frank Cetta MD
Horng H. Chen MD
Roger L. Click MD PhD
Heidi M. Connolly MD
Garvan C. Kane MD PhD
Barry L. Karon MD
Lawrence R. Keenan MD*
Kyle W. Klarich MD
Grace Lin MD
Sushil (Allen) A. Luis MBBS
Joseph F. Maalouf MD
Rekha Mankad MD
Sunil V. Mankad MD
Robert B. McCully MD
Rowlens M. Melduni MD
Hector I. Michelenia MD
Fletcher A. Miller Jr MD
Andrew G. Moore MD*
Darrell (Brian) B. Newman MD*
Vuyisile T. Nkomo MD
Jae K. Oh MD
Patrick W. O'Leary MD
Lyle J. Olson MD
Steve R. Ommen MD
Patricia A. Pellikka MD
Tyler J. Peterson MD*
M. Yasir Qureshi MBBS
Guy S. Reeder MD
Kent H. Rehfeldt MD
Maurice E. Sarano MD
Lawrence J. Sinak MD
Peter C. Spittell MD
Nathaniel W. Taggart MD
Tahir Tak MD PhD*
Jeremy J. Thaden MD*
Marysia S. Tweet MD
Charlotte S. Van Dorn MD
Hector R. Villarraga MD
Carole A. Warnes MD
Brandon M. Wiley MD

Transesophageal Echocardiography
Naser M. Ammash MD
Lori A. Blauwet MD
Crystal R. Bonnichsen MD
Daniel D. Borgeson MD
Horng H. Chen MD
Roger L. Click MD PhD
Heidi M. Connolly MD
Garvan C. Kane MD PhD
Barry L. Karon MD
Lawrence R. Keenan MD*
Sorin V. Pislaru MD
Guy S. Reeder MD

Congenital Echocardiography
Naser M. Ammash MD
Jason H. Anderson MD
Crystal R. Bonnichsen MD
Allison K. Cabalka MD
Frank Cetta MD
Heidi M. Connolly MD
J. Wells Askew III MD
Garvan C. Kane MD PhD
Barry L. Karon MD
Lawrence R. Keenan MD*
Sorin V. Pislaru MD
Guy S. Reeder MD

INTEGRATIVE CARDIAC IMAGING
Eric E. Williamson MD, Director
Jerome F. Breen MD, Codirector
Jae K. Oh MD, Codirector

Cardiology
Nandan S. Anavekar MB BCh
Thomas C. Gerber MD PhD

Radiology
Nilan J. Akhtar MD
Philip A. Aranz MD
Thomas A. Foley MD
Paul R. Julsrud MD
James Glockner MD PhD
Ronald S. Kuzo MD
Darin White MD
Phillip M. Young MD

CARDIOVASCULAR SURGERY
Joseph A. Dearani MD, Chair

Arman Arghami MD
Gabor Bagameri MD
Thomas T. Carmody MD*
M. Sertac Cicek MD
Juan A. Crestanello MD
Richard C. Daly MD
Kevin L. Greason MD
Vishal Khullar MBBS
Alberto Pochettino MD
Phillip G. Rowse MD
Hartzell V. Schaff MD
John M. Stulak MD
Robert J. Weichmann MD*
Mechanical Circulatory Support
John M. Stulak MD, Director
Richard C. Daly MD
Vishal Khullar MBBS

Pediatric Cardiovascular Surgery
M. Sertac Cicek MD
Joseph A. Dearani MD

Robotic Heart Surgery
Arman Arghami MD
Richard C. Daly MD
Joseph A. Dearani MD
Phillip G. Rowe MD

Transcatheter Aortic Valve Replacement/ Hybrid Surgery
Gabor Bagameri MD
Juan A. Crestanello MD
Kevin L. Greason MD
Alberto Pochettino MD

PEDIATRIC CARDIOLOGY
Offers a full range of cardiology services for infants, children and adolescents, including evaluation and treatment of all forms of congenital heart disease, heart rhythm disorders, cardiomyopathy, heart failure, and genetic heart conditions.

Jonathan N. Johnson MD, Chair

Michael J. Ackerman MD PhD
Jason H. Anderson MD
Samuel J. Asirvatham MD
Allison K. Cabalka MD
Bryan C. Cannon MD
Frank Cetta MD
Ben W. Eidem MD
Donald J. Hagler MD
Justin M. Horner MD
Timothy J. Nelson MD PhD
Patrick W. O’Leary MD
Timothy M. Olson MD
M. Yasir Qureshi MBBS
Nathaniel W. Taggart MD
Charlotte S. Van Dorn MD
Philip L. Wackel MD
Carole A. Warnes MD
Katym Bos APRN CNS MS
Sonja H. Dahl APRN DNP CNP

WILLIAM J. VON LIEBIG CENTER FOR TRANSPLANTATION AND CLINICAL REGENERATION
Charles B. Rosen MD, Director

Cardiology
Alfredo L. Clavell MD, Medical Director
Alfredo L. Clavell MD, Transplantation and VAD Program
Atta Behfar MD
Barry A. Boisson MD
Alfredo L. Clavell MD
Shannon M. Dunlay MD
Brooks S. Edwards MD
Robert P. Frantz MD
Sudhir S. Kushwaha MD
Naveen L. Pereira MD
Richard J. Rodeheffer MD
John A. Schirger MD
Jean A. Wagner APRN CNP

Cardiovascular and Thoracic Surgery
Richard C. Daly MD, Surgical Director
Heart and Lung Transplantation
Stephen D. Cassivi MD
Joseph A. Dearani MD
Alberto Pochettino MD
John M. Stulak MD

Pediatric Cardiology
Jonathan N. Johnson MD, Medical Director
Pediatric Heart Transplantation
Patrick W. O’Leary MD
Sonja H. Dahl APRN DNP CNP

Pulmonology
J. P. Scott MD, Medical Director
Lung Transplantation
Cassie C. Kennedy MD
Steve G. Peters MD
Hiroshi Sekiguchi MD
Mark E. Wylan MD

COMMUNITY AND COMPREHENSIVE CARDIOLOGY
Provides cardiology on-site visits throughout the midwest, televisits for subspecialty cardiology problems, and non-invasive imaging services.

David A. Foley MD, Director

Community Cardiology
J. Wells Askew III MD
Crystal R. Bonnichsen MD
David J. Bradley MD PhD
Jorge A. Brenes-Salazar MD
LaPrincess C. Brewer MD MPH
Alfredo L. Clavell MD
Roger L. Click MD PhD
David A. Foley MD
Robert P. Frantz MD
Rajiv Gulati MD PhD
Sharonne N. Hayes MD
Stephen L. Kopecky MD
Margaret A. Lloyd MD MBA
Rekha Mankad MD
Robert D. McBane MD
Robert B. McCully MD
Paul M. McKie MD
Hector I. Michelsen MD
Todd D. Miller MD
Fletcher A. Miller Jr MD
Wayne L. Miller MD PhD
Vuyisile T. Nkomo MD
Steve R. Ommen MD
Michael J. Osborn MD
Sorin V. Pislaru MD PhD
Clarence Shub MD
Peter C. Spittell MD
R. Thomas Tilbury MD
Farris K. Timimi MD
Paul W. Wennberg MD
R. Scott Wright MD
Waldemar E. Wysokinski MD PhD
Jane A. Linderbaum APRN CNP

Comprehensive Cardiology
Jorge A. Brenes-Salazar MD
Maurice E. Sarano MD
Titus C. Evans Jr MD
Robert L. Frye MD
Thomas C. Gerber MD
Jacob C. Jentzer MD
Douglas L. Wood MD
**MAYO CLINIC HEALTH SYSTEM**

David A. Foley MD, Director

Albert Lea, Minn
Appointments: 507-379-2151
Fax: 507-377-6833
Darrell (Brian) B. Newman MD
Christopher L. Lee APRN CNP DNP

Austin, Minn
Appointments: 507-434-1262
Lawrence R. Keenan MD
Andrew G. Moore MD
Colleen R. Nelson CNP RN
Marcia A. Rosendahl CNP RN

Cannon Falls, Minn
Appointments: 507-263-6001

Cardiology
R. Thomas Tilbury MD

Mankato, Minn
Appointments: 877-720-5412
After Hours: 507-385-5777

Cardiology
John H. Haley MD, Chair
Kevin T. Cragun MD
Robert J. Houlihan MD
James J. Milavetz MD
Krishna M. Pamulapati MD
Ripudamanjit Singh MD
Anita K. Anderson PA-C
Susan K. Haugh CNP RN
Natalie A. Hoppe APRN CNP
Theresa M. McGowan APRN MSN CNP
Emran Mohammad APRN CNP

Interventional Cardiology
Krishna M. Pamulapati MD
Ripudamanjit M. Singh MD

Owatonna, Minn
Appointments: 507-446-5102

Michael W. Cullen MD
Breno S. Pessanha MD
Adam C. Brandl APRN CNP

Red Wing, Minn
Appointments: 651-267-5621

Tyler J. Peterson MD
Jeremy J. Thaden MD

Wabasha, Minn
Appointments: 651-565-4571

Cardiology
David A. Foley MD

Eau Claire, Wis
Appointments: 715-838-6320
After Hours: 715-838-3311
Fax: 715-838-6273

Cardiology
D. Fearghas O'Cochlain MD MB BCh, Chair
Michel K. Barsoum MD
Andrew D. Calvin MD
Richard D. Hanna MD
Daniel T. Kincaid MD
Vien Le MD
Shoaib A. Naseem MD
Vishnu R. Patilila MD
Thomas Roy MD
Steven W. Schreiter MD
Gurpreet S. Singh MD
Ismail Tabash MD
Diana I. Trifa MD
Arturo M. Valverde MD
Danielle D. Goodrich PA-C
ordan R. Grabow PA-C
Melanie L. Jandrin PA-C
Jessica L. Joles RN NP
Kathleen A. Kuzmar CNP
Melanie L. Lieftring PA-C
Lisa K. O'Neill CNP
Ann E. Ruffle PA-C
Lindsey Wayne CNP

Electrophysiology
Arturo M. Valverde MD

Interventional Cardiology
D. Fearghas O'Cochlain MD MB BCh
Steven W. Schreiter MD
Gurpreet S. Singh MD

Cardiovascular and Thoracic Surgery
Robert J. Weichmann MD, Chair
Thomas T. Carmody MD
Kirk J. Herzenz PA-C
Gloria R. Krueger PA-C
Shaun T. Marczak PA-C
Mark A. Twesme PA-C

La Crosse, Wis
Appointments: 608-785-0940

Cardiology
Charles R. Cagin DO, Chair
Freddy Del Carpio Muñoz MD
Monique A. Freund MD
Michael S. Meyers MD
Yader B. Sandoval Pichardo MD
Tahir T. MD PhD
Emma J. Banwart CNP RN
Andrea M. Branson CNP RN
Heather M. Mpemwani CNP RN

Electrophysiology
Freddy Del Carpio Muñoz MD

Interventional Cardiology
Charles R. Cagin DO

Visit mayoclinic.org/medicalprofs for more information | The medical professionals page offers physician-specific information including open clinical trials, upcoming CME’s, and e-newsletters covering the latest in diagnosis and treatments
JACKSONVILLE, FLORIDA

Leslie T. Cooper Jr MD, Chair, Department of Cardiovascular Medicine
Si M. Pham MD, Chair, Department of Cardiothoracic Surgery

Mayo Clinic in Florida welcomes inquiries and referrals, and a request to a specific physician is not required.

<table>
<thead>
<tr>
<th>Referrals &amp; Consultations in Florida</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appointments: 904-953-2934 (Local)</td>
</tr>
<tr>
<td>800-634-1417 (National)</td>
</tr>
<tr>
<td>After Hours: 904-953-2000</td>
</tr>
<tr>
<td>Fax: 904-953-0759</td>
</tr>
</tbody>
</table>

**CARDIOThorACIC SURGERY**

Si M. Pham MD, Chair
Magdy M. El-Sayed Ahmed MD
Samuel Jacob MD
Kevin P. Landolfo MD MSc
Ian A. Makey MD
Mathew Thomas MBBS

Heart Transplant and Mechanical Circulatory Support

Kevin P. Landolfo MD MSc, Surgical Director
Daniel S. Yip MD, Medical Director
Juan Carlos Leon Moreno MD
Parag C. Patel MD
Si M. Pham MD

**CARDIOLOGY**

**Adult Congenital Heart Disease and Marfan Syndrome Clinic**

Sabrina D. Phillips MD, Director
Christopher J. McLeod MB ChB PhD

Cardiopulmonary Rehabilitation

Jorge F. Trejo-Gutierrez MD MHS, Director
Brian P. Shapiro MD

Cardiovascular Clinic

Joseph L. Blackshear MD
Charles J. Bruce MD
Leslie T. Cooper Jr MD
Thomas R. Filipe MD
Shahyar (Michael) Gharacholou MD
Carolyn K. Landolfo MD
Gary E. Lane MD
Pragnesh P. Parikh MD
J. Norman Patton MD
Sabrina D. Phillips MD
Dilip P. Pillai MD
Amy W. Pollak MD
Peter M. Pollak MD
Brian P. Shapiro MD
Henry H. Ting MD

Jorge F. Trejo-Gutierrez MD MHS
Steven Ung MD
Mohamad H. Yamani MD

Circulatory Failure

Mohamad H. Yamani MD, Director
Leslie T. Cooper Jr MD
Keith R. Oken MD
J. Norman Patton MD
Steven Ung MD

Heart Rhythm Services

Fred Kusumoto MD, Director
Thomas R. Filipe MD
Christopher J. McLeod MB ChB PhD
Kalpathi L. Venkatachalam MD

Hypertrophic Cardiomyopathy

Joseph L. Blackshear MD
Brian P. Shapiro MD

Ischemic Heart Disease

Shahyar (Michael) Gharacholou MD
Gary E. Lane MD
Dilip P. Pillai MD
Peter M. Pollak MD
Henry H. Ting MD

Marfan Syndrome Clinic

Charles J. Bruce MD
Keith R. Oken MD
Pragnesh P. Parikh MD

Pulmonary Hypertension Cardiology

Brian P. Shapiro MD

Sports Cardiology

Joseph L. Blackshear MD
Pragnesh P. Parikh MD
Brian P. Shapiro MD

Valvular Heart Disease

Joseph L. Blackshear MD, Director
Charles J. Bruce MD
Carolyn K. Landolfo MD
Pragnesh P. Parikh MD
Peter M. Pollak MD
Steven Ung MD

Vascular Medicine

Leslie T. Cooper Jr MD
Amy W. Pollak MD

Women’s Heart Disease

Carolyn K. Landolfo MD, Director
Amy W. Pollak MD

Cardiovascular Imaging (CT, MRI, Nuclear Cardiology)

Thomas R. Filipe MD
Pragnesh P. Parikh MD
Amy W. Pollak MD
Brian P. Shapiro MD

Echocardiography Laboratory

Carolyn K. Landolfo MD, Director
Joseph L. Blackshear MD
Charles J. Bruce MD
Shahyar (Michael) Gharacholou MD
Gary E. Lane MD
Keith R. Oken MD
Pragnesh P. Parikh MD
J. Norman Patton MD
Sabrina D. Phillips MD
Amy W. Pollak MD
Brian P. Shapiro MD
Steven Ung MD

Interventional Cardiology

Shahyar M. Gharacholou MD
Gary E. Lane MD
Dilip P. Pillai MBBS
Peter M. Pollak MD
ROCHESTER, MINNESOTA

Mayo Clinic in Minnesota welcomes inquiries and referrals, and a request to a specific physician is not required.

Referrals & Consultations in Minnesota
Cardiovascular Medicine: 855-MAYOHRT  Fax: 507-266-5278
Cardiovascular Surgery: 866-827-8810  Fax: 507-255-7378
Pediatric Cardiology: 507-284-9969  Fax: 507-538-5817

JACKSONVILLE, FLORIDA

Mayo Clinic in Florida welcomes inquiries and referrals, and a request to a specific physician is not required.

Referrals & Consultations in Florida
Appointments: 904-953-2934 (Local)  800-634-1417 (National)
After Hours: 904-953-2000
Fax: 904-953-0759

PHOENIX & SCOTTSDALE, ARIZONA

Mayo Clinic in Arizona welcomes inquiries and referrals, and a request to a specific physician is not required.

Referrals & Consultations in Arizona
Appointments: 480-301-6539 (Local)  866-629-6362 (National)
Fax: 480-301-4071
Toll-free from Mexico: 001-800-010-1390