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Cardiovascular Medicine Research Mentors 2023






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| <p>Demilade Adedinsewo M.B., Ch.B, M.P.H.</p>  | <p>Research focuses on the epidemiology of cardiovascular disease in women, cardio-obstetrics, and artificial intelligence applications for cardiovascular disease detection and management.</p> |
| <p>Mays Ali, MD</p>  | <p>Interests include structural heart disease and echocardiography, with a focus on valvular heart disease, hypertrophic cardiomyopathy, and interventional echocardiography. Also heavily involved in medical education.</p> |
| <p>Katia Bravo Jaimes, MD</p>  | <p>Research interests include complex congenital heart disease, heart failure therapies in adults with congenital heart disease, cardio-obstetrics, global health and strategies to mitigate racial disparities in cardiovascular medicine.</p> |
| <p>Charles J Bruce M.B, Ch.B</p>  | <p>An expert not only in echocardiography and structural heart disease, but also oversees development of innovation on the Florida campus.</p> |





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| <p>Anca Chiriac, M.D., Ph.D</p>  | <p>Research focuses on complex arrhythmia ablation, arrhythmia impact on survival, predictors of sudden cardiac death, arrhythmia management in congenital heart disease, and novel techniques for refractory ventricular tachycardia</p> |
| <p>Leslie T. Cooper, M.D.</p>  | <p>Research is focused on the evaluation and diagnosis of rare and undiagnosed cardiomyopathies, especially autoimmune variants of myocarditis including giant cell myocarditis. Most of Dr. Cooper's research involves prospective clinical studies.</p> |
| <p>Elizabeth Dineen, DO</p>  | <p>Research interests include sports and exercise cardiology, with a focus on risk stratification, prevention and exercise testing.</p> |
| <p>Abdallah El Sabbagh, M.D.</p>  | <p>Involved in clinical research with a special focus on the diagnosis and percutaneous treatment of mitral valve disease in addition to all aspects of structural heart disease.</p> |





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| <p>Delisa Fairweather, Ph.D</p>  | <p>Research interests include translational studies of myocarditis/DCM, which she has studied for over 25 years, as well as sex differences in inflammation in cardiovascular and autoimmune diseases. New interests include mitochondrial research and hypermobile Ehlers Danlos Syndrome.</p> |
| <p>Thomas R. Flipse, M.D.</p>  | <p>As a Flight Surgeon in the U.S. Navy and staunch advocate of military medicine, Dr. Flipse is highly involved in Mayo's military presence and forges various collaborations between civilian and military medicine.</p> |
| <p>Michael Gharacholou, M.D. M.S.</p>  | <p>Research interest involves management and outcomes of patients with ischemic heart disease. Dr. Gharacholou is heavily involved in clinical outcome projects and resides as Vice Chair of Research in Cardiology.</p> |
| <p>Danesh K. Kella M.B.B.S</p>  | <p>Research interests include outcomes of electrophysiological procedures, particularly in ventricular tachycardia and lead extractions.</p> |

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| <p>Fred Kusumoto, M.D.</p>  | <p>Research interests include evaluation of quality of life and healthcare outcomes with electrophysiology procedures, particularly in the elderly and use of implantable cardiac devices. In addition, he does research in health policy issues including use of real-world data, the cardiology evidence-base, professional liability, and implementation of best practices.</p> |
| <p>Carolyn Landolfo, M.D.</p>  | <p>Clinical and research focus is on echocardiographic imaging, valvular heart disease, cardiotoxicity of chemotherapy, and women's heart health.</p> |
| <p>Gary Lane, M.D.</p>  | <p>Clinical interests include complex ischemic heart disease and management of myocardial infarction.</p> |
| <p>Awais Malik, MD</p>  | <p>Research interests include early diagnosis and management of amyloid cardiomyopathy utilizing artificial intelligence enhanced electrocardiogram, echocardiography and nuclear imaging.</p> |

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| <p>Christopher McLeod M.B., Ch.B, Ph.D</p>  | <p>Research is focused on two predominant areas. The first involves clinical research in adults with congenital heart disease, whereby we aim to developing novel clinical tools to predict and manage events, such as sudden cardiac death. In addition, he works with mobile digital technology in the field of innovation to develop forecasting frameworks together with machine-based learning to preempt events and develop digital signatures for various syndromes.</p> |
| <p>Pragnesh P. Parikh M.D</p>  | <p>Primary interest is in advanced cardiovascular imaging utilizing cardiac magnetic resonance imaging and echocardiography. Dr. Parikh is intimately involved in the structural heart program and has a special interest in interventional echocardiography, particularly using 3D imaging.</p> |
| <p>Julio C. Perez Downes D.O.</p>  | <p>Research is focused on quality improvement projects as well as advanced cardiovascular imaging with echocardiography. Dr. Perez is highly involved in community cardiology.</p> |
| <p>Sabrina D. Phillips M.D.</p>  | <p>Research interests include heart failure during pregnancy, pregnancy in patients with cardiac conditions, congenital heart disease, and valvular heart disease.</p> |

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| <p>Dilip P. Pillai M.D.</p>  | <p>Clinical and research interests include complex coronary artery disease and the management of patients with ischemic heart disease.</p> |
| <p>Amy W. Pollak M.D.</p>  | <p>Research interests include women's heart disease, peripheral artery disease, and preventative cardiology.</p> |
| <p>Peter M. Pollak M.D.</p>  | <p>Research interests include device innovation and development and the use of multi-modality imaging and 3D modeling in planning and guiding structural intervention.</p> |
| <p>Chris Ray M.D.</p>  | <p>Research interests include cardio-oncology, focused on advanced cardiac imaging in the early detection of cardiotoxicity, risk for cardiovascular disease in oncology patients, prevention of cardiovascular complications during cancer therapies, diagnosis and management of immune checkpoint myocarditis, and mechanisms behind immune checkpoint myocarditis.</p> |
| <p>Praj Reddy M.D.</p>  | <p>As an advanced cardiovascular imaging and heavily involved in structural echocardiography, Dr. Reddy focuses on cardiovascular imaging to delve into mechanisms for structural heart disease.</p> |

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| <p>Jay W. Schneider M.D. Ph.D</p>  | <p>Dr. Schneider is heavily involved in research and leads various basic and translational research projects focused on hyperlipidemia as well as novel cardiomyopathy processes.</p> |
| <p>Brian P. Shapiro, M.D. M.A.</p>  | <p>Interest in the use of exercise cardiac MRI in the assessment of various cardiac conditions such as pulmonary hypertension and heart failure and also performs various studies to characterize the cardiac implications of sustained exercise-induced hypertension in master athletes. He is also performing a study at the Sulzbacher Center to assess novel techniques for improved blood pressure control in homeless patients.</p> |
| <p>Bryan J. Taylor Ph.D</p>  | <p>Research focusses on the intricate interplay between the cardiovascular and pulmonary systems, and how pathophysiological changes in cardiopulmonary function contribute to exertional intolerance and impaired quality of life in various cardiopulmonary disease states. He is also interested in outcome responses to exercise training and cardiac and pulmonary rehabilitation programming.</p> |
| <p>Jorge F. Trejo Gutierrez M.D. M.H.S</p>  | <p>Clinical and research career has focused on the epidemiology and prevention of cardiovascular disease in adult populations with an emphasis in atherosclerosis. He is interested in preventative cardiology and cardiac risk factors such as cardiorespiratory fitness, obesity and the role they play in both preventing and managing cardiovascular disease.</p> |

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| <p>Andrew S. Tseng M.D.</p>  | <p>Research interest include clinical electrophysiology, applications of artificial intelligence, and the genetic arrhythmia syndromes, such as long QT syndrome, Brugada syndrome, early repolarization syndrome, and catecholaminergic polymorphic ventricular tachycardia.</p> |
| <p>Christoff van Niekerk, M.D.</p>  | <p>Primary interest lies in outcome research related to atrial and ventricular arrhythmia ablation, CIED extractions and left atrial appendage closure and post procedure management. Furthermore, he has interests in exploring new applications of analgesic techniques for the reduction of post CIED implantation and developing teaching techniques utilizing 3D printed cardiac models.</p> |
| <p>Mohamad H. Yamani M.D.</p>  | <p>Professor of medicine and clinical adult heart failure and transplant specialist. His translational science research has focused on the role of integrins, angiotensin receptors, tissue factor, beta-myosin heavy chain, chemokines, chimerism and metalloproteinase induction system in heart failure patients. He has expertise in cardiomyopathies, myocarditis, sarcoidosis, hypertrophic cardiomyopathy and amyloidosis.</p> |
| <p>Rohan Goswami, M.D. Heart Failure & Transplant</p>  | <p>Background in information technology and is focused on innovation and clinical research.</p> |
| <p>Juan Carlos Leoni Moreno, M.D. Heart Failure & Transplant</p> | <p>Focuses on clinical trials and outcomes in advanced heart failure, temporary and durable mechanical circulatory support and heart transplantation, preservation and perfusion of donor organs, cardiac amyloidosis treatment</p> |

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|  | <p>including transplant, and health care disparities, diversity, equity and inclusion in heart failure and transplant. He also participates in multiple clinical trials studying medical and device treatments in patients with advanced heart failure.</p> |
| <p>Melissa Lyle, M.D. Heart Failure & Transplant</p>  | <p>Trained in advanced heart failure and transplantation, and her research interests include advanced heart failure, mechanical circulatory support, and cardiac transplantation. She also specializes in amyloid cardiomyopathy, and has a particular interest in heart transplantation in amyloidosis, with a focus on post-transplantation management of the extracardiac manifestations of amyloidosis.</p> |
| <p>Parag Patel, M.D. Heart Failure & Transplant</p>  | <p>Research interest includes outcome studies in advanced heart failure, mechanical circulatory support and cardiac transplant. He primarily is involved in clinical research trials and registry reviews.</p> |
| <p>Jose Nativi Nicolau, M.D. Heart Failure & Transplant</p>  | <p>Practice and research focus on cardiac amyloidosis, cardiogenic shock, mechanical circulatory support, and heart transplantation. In addition, he collaborates with clinicians and researchers worldwide to promote early diagnosis and access to therapies for patients with advanced heart failure and amyloidosis.</p> |

Daniel Yip, M.D.
Heart Failure & Transplant



Focuses on clinical trials and outcomes in advanced heart failure, mechanical circulatory support and heart transplantation, preservation and perfusion of donor organs, and tools to improve health care communication. He also participates in multiple clinical trials studying medical and device treatments in patients with advanced heart failure.