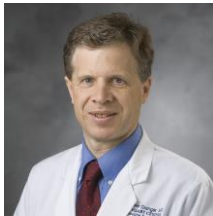


Quantum AF Steering Committee

Core Steering Committee

Co-Chair: Christopher B. Granger, MD, FACC, FAHA

Duke University Medical Center



Dr. Christopher Granger is a Professor of Medicine in the Division of Cardiology at Duke University and Director of the Cardiac Care Unit for the Duke University Medical Center. Dr. Granger is a Fellow of the American College of Cardiology, the American Heart Association, and of the European Society of Cardiology. He is Associate Editor of the American Heart Journal and serves on the editorial board of the Journal of the American College of Cardiology. He is a cardiology section author for Current Medical Diagnosis and Treatment. He serves on the publication oversight committee of the American Heart Association and he is chairman of the Advisory Working Group of the American Heart Association Mission: Lifeline program. He is a member of the 2011 ACC/AHA STEMI Guidelines Committee. He has served on FDA advisory committees on an ad hoc basis. He is on the Board of External Experts of the National Heart, Lung and Blood Institute (NHLBI).

Dr. Granger's primary research interest is in the conduct and methodology of large randomized clinical trials in heart disease; he has co-authored more than 400 peer-reviewed manuscripts. He currently serves on a number of clinical trial steering committees and data safety monitoring committees. He has coordinated the Duke Clinical Research Institutes' activities in many clinical trials evaluating acute MI reperfusion and antithrombotic strategies in acute coronary syndromes and in atrial fibrillation.

Dr. Granger is co-chairman of the Steering Committee of the ARISTOTLE trial assessing an oral factor Xa inhibitor for stroke prevention in atrial fibrillation. In addition, he is co-director of the Reperfusion of Acute MI in Carolina Emergency Departments (RACE) projects, North Carolina state-wide programs to improve reperfusion care for acute myocardial infarction and care for cardiac arrest.

Co-Chair: Elaine M. Hylek, MD

Boston University School of Medicine



Elaine M. Hylek, MD, MPH, is a Professor of Medicine at Boston University School of Medicine. She received her MD from the University of Pittsburgh School Of Medicine and a Masters in Public Health (quantitative methods) from Harvard University School of Public Health. She completed her residency training in internal medicine at Massachusetts General Hospital and Harvard Medical School in Boston, Massachusetts. Her research areas include arterial (stroke) and venous thrombosis, anticoagulant therapies, and atrial fibrillation. She has served as PI on several NIH R01 grants, served on the Executive Steering Committees for international clinical trials and national registries, Event Adjudication Committees, and Data Safety Monitoring Boards. She has also served as the Late Breaking Clinical Trial Discussant for multiple international trials in the field of thrombosis. Dr. Hylek is a Section Editor for Thrombosis and Haemostasis, a member of the International Society of Thrombosis and Haemostasis Executive Committee for World Thrombosis Day, and the Director of the Thrombosis and Anticoagulation Service at Boston Medical Center. She is extensively published and designated a *U.S. News Top Doctor* and voted *Best Doctors in America* for the past decade.

Sean D. Pokorney, MD, MBA

Duke University Medical Center



Sean Pokorney is a research faculty member at the Duke Clinical Research and will be completing a clinical fellowship in electrophysiology at Duke University Medical Center in June 2017. He earned his BA in Economics at Northwestern University, his MD from Northwestern Feinberg School of Medicine, and his MBA from Northwestern Kellogg School of Management. Dr. Pokorney completed internal medicine residency at Northwestern McGaw Medical Center. He is currently working towards an MHS at the Duke School of Medicine. Dr. Pokorney's research interests include stroke prevention in atrial fibrillation, risk of sudden death after acute cardiovascular events, and complex lead management for patients with pacemakers and implantable cardioverter defibrillators. Dr. Pokorney's research focuses on identifying gaps in care through outcomes research and leveraging implantation science and clinical trials to address these gaps. He is an active participant in the Outcomes Registry for Better Informed Treatment of Atrial Fibrillation (ORBIT-AF), and he serves as a committee member for the Electrophysiology and Arrhythmias Council within the American Heart Association (AHA).

Kevin Anstrom, PhD

Duke University Medical Center



Kevin Anstrom, PhD, joined Duke University faculty in the Fall of 2002. He is the Associate Director of Biostatistics and Faculty Director of Data Solutions for Clinical Trials at DCRI. He is an Associate Professor in the Department of Biostatistics and Bioinformatics at Duke University. He has been involved in clinical research for more than 20 years. Dr. Anstrom has been the Principal Investigator for multiple NIH-funded Data Coordinating Centers for more than a decade. He has published over 200 peer-reviewed manuscripts and book chapters. Kevin received his BS degree from Cornell University, his MS degree from University of North Carolina-Chapel Hill, and his PhD from North Carolina State University. Recently, Dr. Anstrom and his team at Duke University received a 7-year federal grant to promote more efficient clinical trials of drugs and devices.

Steering Committee Members

Mark Alberts, MD

Physician in Chief, Hartford HealthCare



Mark Jay Alberts, MD, is chief of neurology at Hartford Hospital in Hartford, Connecticut. He also serves as the head of the Neuroscience Institute for the Hartford HealthCare system. Previously, he was vice chair, hospital services, of the Department of Neurology and Neurotherapeutics at the University of Texas Southwestern Medical Center in Dallas, Texas. Dr Alberts' main research interests include investigating new treatments for acute stroke, novel medications and interventions for stroke prevention, and the use of stroke centers to improve the delivery of stroke care.

He has authored or coauthored more than 200 scientific articles on stroke and other neurologic disorders that have been published in peer-reviewed journals such as *Neurology*, *Circulation*, *Heart*, *JAMA*, *Lancet Neurology*, and *Stroke*. He is also the author or coauthor of more than 30 book chapters, served as the genetics section editor of *Stroke*, and was editor of the book *Genetics of Cerebrovascular Disease*. Currently, he is an associate editor for stroke for the journal *Circulation*.

In 2012, Dr Alberts was awarded the "Neurologist Pioneering Award" by the Society of Vascular and Interventional Neurology. He is a member of various committees and boards; he serves as co-chair of the National Institute of Neurological Disorders and Stroke Brain Attack Coalition and is a member of the American Heart Association/American Stroke Association Hospital Accreditation Science Committee. He was chairperson of the AHA Brain Stroke Study Group and has served on National Institutes of Health and United States Department of Veterans Affairs study sections.

Dr Alberts earned his medical degree from Tufts University School of Medicine in Boston, Massachusetts. He completed a neurology residency and a stroke fellowship at Duke University Hospital in Durham, North Carolina.

Peter Berger, MD

Independent Consultant



Dr. Peter Berger is currently serving on an Advisory Committee to the Commissioner of Health in the State of New York, and consulting with some companies around research activities. Until December 31, 2016, Dr. Berger was the Senior Vice President of Clinical Research at Northwell Health. He was also a Professor of Cardiology and Medicine at Hofstra – Northwell School of Medicine and an interventional cardiologist at North Shore University Hospital. Prior to joining Northwell, Dr. Berger worked for 9 years at Geisinger Health System as the Chairman of Cardiology (over 9 hospitals), Director of Clinical Research, System-Wide, and an Associate Chief Research Officer. Before joining Geisinger in 2006, he was a Professor of Medicine and the Director of Interventional Cardiology at Duke University Medical Center, and Co-Director of Cardiovascular Device Research at Duke Clinical Research Institute. Before Duke, Dr. Berger was a Professor of Medicine in the Division of Cardiology at the Mayo Clinic College of Medicine for 14 years.

Dr. Berger has served on and chaired the American Heart Association Committee on Diagnostic and Interventional Catheterization, and served on the Cardiac Catheterization and Interventional Cardiology Committees of the American College of Cardiology and the Society of Cardiac Angiography and Intervention. Dr. Berger has been a member of the American Board of Internal Medicine that writes the interventional cardiology board exam. Dr. Berger received his medical degree from New York University School of Medicine and did his residency and fellowship at Boston City Hospital and Boston University Medical Center.

Michael P. Dorsch, PharmD, MS, FCCP, FAHA, BCPS (AQ Cardiology)

University of Michigan



Dr. Michael Dorsch is a Clinical Associate Professor at the University of Michigan College of Pharmacy and Clinical Pharmacist in Cardiology at the Department of Pharmacy Services, University of Michigan Health System, Ann Arbor, MI. He provides clinical pharmacy services for inpatient cardiology at the University of Michigan Frankel Cardiovascular Center and teaches at the College of Pharmacy. Dr. Dorsch is also the Director of the Cardiology Pharmacy Residency Program at the University of Michigan.

Dr. Dorsch is a health outcomes researcher focusing on quality improvement and the use of health information technology in patient care. His current funded work emphasizes increasing adherence to a low sodium diet in hypertension, validating an in home automated medication dispensing machine and increasing self-monitoring in heart failure to promote self-management strategies.

Gregory J. Fermann, MD

University of Cincinnati College of Medicine



Gregory J. Fermann, MD, is Professor of Emergency Medicine at the University of Cincinnati College of Medicine where he serves as the Executive Vice Chairman of the Department of Emergency Medicine. He received his bachelor's degree in chemistry from Saint Louis University in St Louis, Missouri and medical degree from the University of Cincinnati in Cincinnati, Ohio. He completed his residency training in emergency medicine at the Maricopa Integrated Program in Emergency Medicine in Phoenix, Arizona where he served as chief resident.

After residency, Dr Fermann returned home to Cincinnati where he joined the Department of Emergency Medicine at the University of Cincinnati, the first Emergency Medicine Residency Program in the United States, where he remains today. Dr Fermann served as the Medical Director for the University of Cincinnati Medical Center (UCMC) Emergency Department and as the chairman of Emergency Medicine at The Christ Hospital in Cincinnati. He remains active in the clinical practice of emergency medicine at West Chester Hospital and UCMC, where he serves on the Medical Executive Committee. Dr Fermann academic interests are in acute cardiovascular diagnostics and therapeutics. He is a member of the Emergency Medicine Cardiac Research and Education Group and Emergency Medicine Research and Outcomes Consortium. He has received extramural funding from the NHLBI, PCORI, foundation and industry sources. He has published more than 80 peer reviewed manuscripts and book chapters in the field of risk stratification in acute heart failure, acute coronary syndrome and thromboembolism. He is a reviewer for several leading journals, including Annals of Emergency Medicine, Journal of Cardiac Failure, and JACC Heart Failure, and is on the Editorial Board of Biomarkers. He is the founder and director of the Clinical Trials Center at the University of Cincinnati.

Susan Marx Mashni, Pharm D, BCPS

Mercy Health



Dr. Mashni is currently the Chief Pharmacy Officer for the Mercy Health system headquartered in Cincinnati, Ohio. In this role, Sue oversees pharmacy practice in 23 hospitals, over 20 retail pharmacies and 20+ ambulatory pharmacy practice sites in Mercy Health, in Ohio and Kentucky. Additionally, Dr. Mashni oversees a Population Health Pharmacy team, Mercy's Specialty Pharmacy, Mercy's Mail Order facility and a team that helps to manage Mercy's PBM relationship for employee health.

Prior to this role, Dr. Mashni was the Drug Policy Director at Mercy, responsible for formulary management for the system and for the pharmacist perspective in the clinical content development of orders sets within the electronic health record. In this role, Sue's team saved over \$50 million dollars in formulary cost savings, and standardized over 400 order sets for use across Mercy Health. Mercy Health received Epic's "Success at Seven" award for formulary management in 2015.

Sue attended the Ohio State University for both her BS Pharm and Pharm D degrees. After pharmacy school, Sue's first role was as a Clinical pharmacist in Neurology ICU at Johns Hopkins in Baltimore, MD, where she published on documentation of the impact of clinical interventions of pharmacists in the hospital. Returning to Ohio, she helped to develop the Neonatal ICU Pharmacy at the University of Cincinnati Medical Center. Following her premises into the ambulatory space, her next position was as a Clinical Pharmacist at Cincinnati Children's in HomeCare & Starshine Hospice. Sue was the Pharmacy Clinical Coordinator at Mercy Hospitals in Anderson and Clermont in Cincinnati prior to coming to the Mercy Health Home Office in 2009.

She regularly presents at national meetings on medication management, standardization of formularies as well as the pharmacist's role in the electronic health record.

Dr. Mashni is also an Adjunct Professor at UC College of Pharmacy and serves on several UC College of Pharmacy committees. Sue serves on the several advisory boards and is on the Board of the St. Vincent de Paul Charitable Pharmacy in Cincinnati.

Gerald V. Naccarelli, M.D., FACC, FAHA, FHRS

Pennsylvania State University College of Medicine/Milton S. Hershey Medical Center



Gerald V. Naccarelli M.D. was born in Philadelphia, Pa, received his B.S. in Biology from St. Joseph's University and his M.D. degree from the Pennsylvania State University College of Medicine in Hershey. He was an Internal Medicine Resident at the North Carolina Baptist Hospital/Bowman Gray School of Medicine (Wake Forest University). He was a Fellow in Cardiology and Chief Resident in Medicine at the Penn State University College of Medicine followed by a UPSHS postdoctoral Fellow in Cardiac Electrophysiology at the Indiana University School of Medicine. Prior to his current position at Hershey, he was Director of Clinical Electrophysiology and Vice-Chairman of Cardiology at the University of Texas Medical School at Houston. In 1995 he moved to Hershey and currently is the Bernard Trabin Chair in Cardiology, Professor of Medicine, Chief of the Division of Cardiology, and Associate Clinical Director of the Heart and Vascular Institute at the Pennsylvania State University College of Medicine/Milton S. Hershey Medical Center.

Dr. Naccarelli had been a member of multiple national committees of the American Heart Association (AHA), American College of Cardiology (ACC) and the Heart Rhythm Society (HRS). He is past-president of NASPE (HRS) and a past-member of the Board of Trustees of the American College of Cardiology and HRS. He served on the ABIM Subspecialty Board on Cardiovascular Diseases from 1999-2005 and was the Chair of the ABIM Cardiovascular Diseases SEP Committee from 2006-2016. He was a charter member of CMS' Ambulatory Payment Classification (APC) advisory panel. He is an elected member of the Association of University Cardiologists (AUC) and member and Past-President of the Association of the Professors of Cardiology (APC).

Dr. Naccarelli is internationally recognized for his clinical, teaching and research contributions. He has been listed in the best Doctors of America (Cardiovascular Diseases - Electrophysiology) since 1992 and America's Top Doctors (Castle Connolly) since 2001. Dr. Naccarelli has trained

more than 30 fellows in cardiac electrophysiology and over 150 fellows in Cardiology over his 35 years of clinical practice.

Dr. Naccarelli's research interests are in atrial fibrillation, novel anticoagulants for the prevention of stroke in atrial fibrillation, arrhythmia trials, implantable devices for treating arrhythmias and congestive heart failure, antiarrhythmic drug development and autonomic aspects of arrhythmogenesis. He has published over 600 peer review papers, book chapters, reviews and abstracts and is the author/co-author of 4 arrhythmia related books. Dr Naccarelli has been involved in the clinical development and approval of all the antiarrhythmic agents released in the USA over the last 30 years. He has been an active consultant to over 25 companies in medical industry and is currently on the steering committee of multiple major clinical trials.

He is a recipient of the 1993 Paul Dudley White Award from the American Heart Association, the 2013 Heart Rhythm Society Distinguished Service Award and the 2016 Distinguished Teacher Award, the 2001 Nycomed Amersham Award for Excellence Honoring Leadership, Achievement and Commitment to the Profession from the American College of Cardiovascular Administrators and the 2012 Clarence E. Shaffrey, S.J. Award, from St. Joseph's University, in recognition of his service and outstanding achievement in the medical profession. He is currently on the editorial board of 10 scientific journals in addition to being Associate Editor of the Journal of Interventional Cardiac Electrophysiology and a past Associate editor of Circulation.

Eva Kline-Rogers, MS, NP, AACC

University of Michigan



Eva Kline-Rogers, MS, NP, AACC, currently works as a Cardiovascular Nurse Practitioner and is the co-director for MCorRP (Michigan Cardiovascular Outcomes Research and Reporting Program) at the University of Michigan. She also functions as a project manager/QI Coordinator for several on-going state-wide and international registries, including the Michigan Anticoagulation Quality Improvement Initiative (MAQI2), the US Fibromuscular Dysplasia Registry, and had previously managed BMC2 (Blue Cross Blue Shield of Michigan Cardiovascular Consortium).

Eva received her undergraduate and graduate degrees from the University of Michigan's School of Nursing as well as certification as an Acute Care Nurse Practitioner. She has functioned as a clinical research coordinator, clinical nurse specialist, and nurse practitioner during her tenure at the University of Michigan. She has published articles on thrombolytic therapy and quality improvement and lectures on topics ranging from outcomes research to transitions of care. She is also an ad hoc editorial reviewer for the American Heart Journal and is an active member of the American College of Cardiology, having participated as a working group member for the Door to Balloon (D2B) Initiative, Best Practices and Quality Improvement (BPQI), Quality Portfolio Management (QPM), chair of the Surviving AMI (SAMI) Toolkit Subcommittee and is currently a board member for the Anti-coagulation Forum (ACF).

Kevin Thomas, MD

Duke University Medical Center



Dr. Thomas is a Cardiac Electrophysiologist, an Associate Professor of Medicine in the Division of Cardiovascular disease at Duke University Medical Center. He maintains multiple administrative positions across Duke Health including: Assistant Dean of Underrepresented Faculty Development, the Director of Faculty Diversity and Health Disparities Research at the Duke Clinical Research Institute (DCRI), Associate Director of the Duke CTSA TL-1 scholars program, Co-director of the Duke Health Disparities Research curriculum, and is a member of the Dean's Advisory Council for URM Faculty. Dr. Thomas received his undergraduate degree from Emory University and Medical Degree from the University of North Carolina at Chapel Hill. He completed an Internal Medicine Residency, Cardiology and Cardiac Electrophysiology fellowships at Duke University Medical Center and served as Chief Resident in the department of medicine in 2003-2004. Dr. Thomas is well published in the field of racial and ethnic differences in cardiovascular care delivery and outcomes. He has received research funding from NIH/AHA/ and PCORI. His work in the field of disparities in therapies to prevent sudden cardiac arrest has received national recognition and his study on racial differences in cardiovascular mortality was featured in Ebony magazine. Dr. Thomas is an active member of the Association of Black Cardiologists and the National Medical Association. His passion and commitment to eliminating racial and ethnic disparities in cardiovascular care and outcomes is reflected in his research focus and mentoring of students, residents and fellows committed to careers in health disparity research.