

MCW INTERVENTIONAL FELLOWSHIP – PROGRAM DESCRIPTION

OVERVIEW and OBJECTIVES:

The Interventional Cardiology Fellowship at Froedtert Hospital and the Medical College of Wisconsin is a one-year ACGME-approved program, organized under the directorship of Peter Mason, MD, MPH. The fellowship functions as an integral component of the subspecialty residency in cardiology and the categorical residency program in internal medicine. The primary objective of the Interventional Cardiology Fellowship is to provide comprehensive subspecialty training in invasive and interventional cardiology, and considerable experience in structural heart disease (SHD) and percutaneous SHD procedures. Fellows graduating from the MCW-FH program will be COCAT level III trained in Interventional Cardiology, eligible for the ABIM Interventional Cardiology board examination, and prepared to be skilled and thoughtful independent operators.

The fellowship program provides the opportunity to acquire procedure expertise in a wide variety of interventional procedures including, but not limited to:

- Coronary angioplasty and stenting
- Rotational atherectomy
- Cutting balloon angioplasty
- Rheolytic and mechanical thrombectomy
- Intravascular ultrasound and optical coherence tomography
- Intracoronary physiologic assessment (FFR, iFR)
- Transfemoral and transradial access for coronary angiography and intervention
- Alcohol septal ablation
- Insertion and management of hemodynamic support devices:
 - Intra-aortic balloon pump
 - CP and 5.0 Impella
 - Tandem Heart
 - Percutaneous ECMO
 - RV Impella
 - Protek Duo
- Structural heart disease:
 - TAVR
 - TMVR
 - MitraClip
 - Watchman
 - ASD/PFO closure
 - Aortic, mitral and pulmonic balloon valvuloplasty
 - Investigational devices
- Peripheral angiography and intervention
- Hybrid cardiothoracic surgery
- Pediatric interventional cardiology procedures

The graduating fellow will easily exceed the minimum ACGME requirement of 250 coronary interventions, and we anticipate that the fellow will perform between 300 to 350 coronary interventions during the one-year program. A graduated level of responsibility is promoted, and the fellow will be the primary operator on the majority of these cases. In addition, depending on fellow performance and interest busy structural heart and peripheral vascular intervention programs allow direct exposure and involvement to considerable procedure volume in these areas.

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Structural Heart Disease Team

The interventional fellow is responsible for pre-procedural patient assessment, determination of the indications, risks and benefits of the scheduled procedure, and helping to develop an appropriate procedural plan. The fellow is an integral part of the interventional team responsible for the daily care of interventional cardiology and structural heart disease patients, and providing hospital based clinical consultation. In addition to hospital and cath lab duties, the fellow will participate in a weekly longitudinal cardiology clinic and have the equivalent of ½ day per week protected for research.

The Interventional Cardiology Fellowship didactic program consists of a comprehensive core curriculum lecture series, monthly journal club, complex case discussion conference, and intensive morbidity and mortality review. In addition, the fellow is expected to participate in the weekly multidisciplinary structural heart disease conference, the joint cardiothoracic and cardiovascular medicine complex case conference, and other division conferences including grand rounds and morbidity and mortality. The fellow is responsible for coordinating and leading the interventional cardiology case review, journal club, and morbidity and mortality conferences, and preparing and presenting one Cardiovascular Medicine Grand Rounds.

The cardiovascular catheterization laboratory at Froedtert Hospital and the Medical College of Wisconsin is currently participating in clinical investigations involving novel devices and/or indications for percutaneous treatment of coronary artery disease, percutaneous transaortic valve replacement, percutaneous mitral valve replacement and/or repair, percutaneous interventions for management of advanced heart failure, and clinical trials and/or registry protocols in cardiogenic shock, ASD/PFO closure, and TAVR. The fellow will be involved in the evaluation of patients for clinical research trials, attendee at research conferences, and is expected to pursue supported but independent research and/or academic writing projects.

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FACILITIES and STAFF:

The Froedtert Hospital Cardiac Catheterization Laboratory is comprised of 4 state-of-the-art, high-resolution digital fluoroscopy units. The integrated procedural platform also has 2 electrophysiology labs, 2 neuro-intervention labs, and 6 interventional radiology labs. There are also 2 separate hybrid labs located in the surgical operating area. A wide variety of diagnostic and interventional procedures are performed in these laboratories, with approximately 2500-3000 cardiac cases done per year in the cardiac catheterization laboratory rooms. Of this total, there are 400 to 500 coronary interventions and 200 to 250 structural heart interventions. The majority of post-procedure patients and those with acute cardiovascular disease are managed on a 30 bed cardiovascular step-down unit and a 20 bed cardiac intensive care unit that are both located on the same hospital floor as the cardiac catheterization laboratory. The peri-procedural recovery area, echocardiogram and stress test labs, and ambulatory cardiovascular medicine and subspecialties clinic are located in an attached and immediately adjacent state-of-the-art 12 floor building called the Centers for Advanced Care.



Froedtert Hospital Hybrid OR



Froedtert Hospital Cath lab

The Milwaukee VA Hospital Cardiac Catheterization Laboratory is comprised of 2 state-of-the-art high-resolution digital fluoroscopy units that are shared between interventional cardiology and electrophysiology. The annual number of cardiac and vascular diagnostic and interventional procedures performed in these laboratories is between 750 and 1000, of which approximately 200-250 are coronary interventions.



Milwaukee VA Hospital



Milwaukee Regional Medical Center (MCW, Froedtert Hospital, and the Children's Hospital of Wisconsin)



Center for Advanced Care (LEFT, CFAC floors 9-12 will be completed in 2019) and Cancer Center (RIGHT)

The division of cardiovascular medicine at MCW is comprised of 45 full-time cardiology faculty, 19 advanced practitioners, and a 10 person clinical research department. All clinical subspecialties in cardiology are represented, including advanced heart failure and transplantation, congenital heart disease, vascular medicine, electrophysiology, structural and interventional cardiology, and preventive medicine. There are 8 full-time interventional cardiology faculty at the Medical College of Wisconsin who share the responsibilities of the Froedtert Hospital and Milwaukee VA Hospital cardiac catheterization laboratories and on-call duties. All faculty are fellowship trained and ABIM certified in interventional cardiology, and hold a faculty position of associate or full professor. Interventional cardiology faculty at MCW have active roles in medical student and/or graduate medical education, division and/or departmental leadership, hospital administration, and regional and/or national professional association leadership positions. Faculty are committed to the fellow's development and are available for professional, personal and academic research mentorship.

THE MEDICAL COLLEGE OF WISCONSIN

The Medical College of Wisconsin is the 4th largest private medical school in the nation and has campuses in three separate locations (Milwaukee, Green Bay, and Central Wisconsin) and approximately 1,400 medical, pharmacy and graduate students. MCW is in the top 5% nationally in terms of the number of resident and fellows trained each year. The MCW research enterprise is the second largest in the state of Wisconsin and was ranked 21st in the nation in 2018 for NHLBI research funding.

Froedtert Hospital and the Medical College of Wisconsin is one of only two academic medical centers in Wisconsin, and the only academic medical center in Milwaukee and eastern Wisconsin. With over 520 beds and the region's only level 1 trauma center, Froedtert Hospital exceeds 26,000 admissions/year and serves as a referral center for eastern Wisconsin as well as portions of northern Illinois and Indiana, and the Upper Peninsula of Michigan.

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HUB for Collaborative Medicine (MCW academic department office building, 2018)

MCW is an Equal Opportunity Employer Minorities/Women/Veterans/Disabled.

ABOUT MILWAUKEE, WI:

The Milwaukee metropolitan area is known for accessibility, culture and an active four-season lifestyle. Milwaukee is one of the Midwest's best-kept secrets and is a one-of-a-kind city with a bustling lakefront, an impressive array of restaurants, cafes and beer gardens, several professional and major collegiate sports teams, and numerous nationally acclaimed music and food festivals. The affordable and beautiful city is located on the coast of Lake Michigan and has diverse residential options ranging from metropolitan downtown, the Historic Third Ward, Riverwest, Bayview, Walker's Point, and suburban communities. Public and private school systems are excellent. Milwaukee is home to a number of colleges, universities and multinational corporations and as a result enjoys a rich cultural, academic, research, and professional environment. Milwaukee is host to a major international airport and is located approximately 90 minutes north of Chicago, IL and 90 minutes east of Madison, WI.

