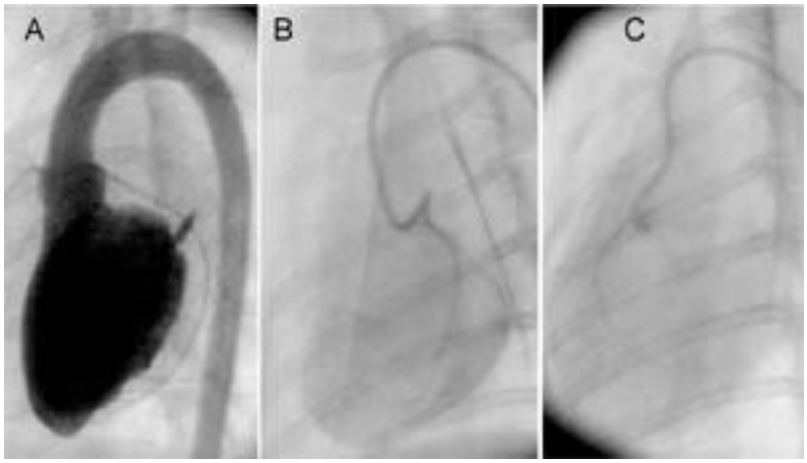
UAMS

UNIVERSITY OF ARKANSAS
FOR MEDICAL SCIENCES

Nothing "Beats" Cardiology @ UAMS

Interventional Cardiology Fellowship Program Handbook 2020 - 2021



Revised: 08/30/2020

Introduction

Overview

The Division of Cardiology offers excellent clinical training in an academic environment. The Interventional Cardiology Fellowship Program is committed to training clinical and academic leaders in Cardiovascular Medicine by teaching them to:

1. Understand the usefulness and limitations of catheter-based interventions in order to properly select patients for these procedures.
2. Acquire the necessary fund of knowledge and technical proficiency to perform high quality, state of the art interventional cardiac procedures.
3. To promote an outlook of enduring scholarship and analytical thinking required to benefit from experience and assimilate future advancements.
4. To commit to professionalism (including quality assessment and improvement as well as humanistic integrity) in all aspects of medical care and procedure performance.

The University of Arkansas for Medical Sciences provides specialized training in the field of Interventional Cardiology for three fellows each year. The intensive experience includes interventional techniques and related patient management issues. Clinical experience will include opportunities to diagnose, select therapeutic modalities, perform interventional procedures and manage and evaluate the effectiveness of treatment for both inpatients and outpatients with acute and chronic coronary and valvular heart disease. Interventional fellows will also take an active role in research, including large randomized multi-center and fellow-initiated trials.

The Interventional Fellowship program is a one-year experience and fellows will receive one-on-one personal improvement guidance from our faculty as well as documented semi-annual evaluations and an end of year exit interview.

All fellows successfully completing the program will be eligible for board certification in Interventional Cardiology.

Institutions

University of Arkansas for Medical Sciences
The University of Arkansas for Medical Sciences (UAMS) serves as the state's only academic medical center, providing state-of-the-art care to patients as well as groundbreaking research. It is internationally renowned for its bone marrow transplant center and skull-based surgery. It serves as a major referral center for patients across Arkansas, providing fellows with a broad range of patients in both the in-patient and out-patient settings. It features a Cardiac Catheterization Laboratory capable of performing a variety of procedures. UAMS is one of the co-sponsoring institutions for the interventional cardiology fellowship.

Central Arkansas Veterans Healthcare System

The Central Arkansas Veterans Healthcare System (CAVHS) is 2 hospitals under a single umbrella and also includes outpatient clinics in 3 different central Arkansas locations. The Little Rock VA is the acute care hospital, where all interventional cardiology procedures and the out-patient clinic take place. CAVHS patients routinely come to this center from across Arkansas and the surrounding states, bringing a great number of patients with all stages of atherosclerotic disease and making CAVHS one of the busiest VA cardiology services in the country. This large number of patients gives Interventional Fellows exposure to a variety of catheterization procedures. Over its 81-year history, CAVHS has earned an excellent reputation in patient care, education, and research. It serves as the other co-sponsoring institution for the interventional cardiology fellowship.

Arkansas Heart Hospital

The Arkansas Heart Hospital (AHH) is an entire hospital dedicated to the treatment of heart disease. A wide variety of cardiac and endovascular and surgical procedures are performed. AHH features 6 catheterization laboratories.

Program Leadership

The Interventional Cardiology Fellowship is under the leadership of the program director who is ultimately responsible for all program decisions. He receives assistance from associate program directors and the program coordinator. The IC Fellowship **Program Evaluation Committee (PEC)** guides all key decisions and policies for the program. This committee meets on a regular basis to review the most important issues relevant to fellowship training. This committee is composed of the current IC fellows, program director, the associate program directors, and other interested faculty members. The program coordinator attends & takes notes at meetings.

The members of the **PEC** are as follows:

1. **Interventional Cardiology Fellows**
2. **Interventional Cardiology Faculty**

Barry F. Uretsky, MD
Program Director, Interventional Cardiology Fellowship
Director, Interventional Cardiology, CAVHS and UAMS
Chair, PEC

Malek Al-Hawwas, MD
Assistant Professor of Medicine
Director of Cardiac Catheterization Laboratory, UAMS

William Rollefson, MD
Clinical Professor of Medicine, UAMS
Director of Interventional Cardiology and Cardiac Catheterization Laboratory, AHH

Shiv Kumar Agarwal, MD
Assistant Professor of Medicine, UAMS
Interventional Cardiologist, Little Rock VA

The fellowship Clinical Core Competency (CCC) committee meets semi-annually and tracks the progress of the fellow's training & guides all key decisions related to that progress. This committee meets on a semi-annual basis to review the most important issues relevant to fellowship training & progress. This committee is composed of the program director, the associate program directors, and other interested faculty members. The program coordinator attends & takes notes at meetings.

The members of the **CCC committee** are as follows:

Barry F. Uretsky, MD
Program Director, Interventional Cardiology Fellowship
Director, Interventional Cardiology, CAVHS

Malek Al-Hawwas, MD
Assistant Professor of Medicine
Interim Director of Interventional Laboratories, UAMS

Shiv Kumar Agarwal, MD
Assistant Professor of Medicine, UAMS
Assistant Director of Interventional Laboratories, CAVHS

William Rollefson, MD
Clinical Professor of Medicine, UAMS
Director of Interventional Cardiology and Cardiac Catheterization Laboratory, AHH

Interventional Cardiology Faculty

The faculty in the Cardiology division is a diverse group of individuals, representing some of the best and brightest clinicians and researchers at UAMS. These individuals bring a unique and cutting-edge perspective to clinical care and research.

Clinical Faculty

Barry F. Uretsky, MD - Clinical Professor of Medicine, Director of Interventional Cardiology, CAVHS, and Director, Interventional Cardiology Fellowship Program, UAMS

Dr. Uretsky joined UAMS in 2009. He has over 30 years of experience in interventional cardiology and a long career in academic institutions. Prior to joining UAMS, he served as Director of the Cardiac Catheterization Laboratory, Director of Cardiology and Program Director of Interventional Cardiology at the University of Texas Medical Branch in Galveston. He was voted "Super Doctor" two years in a row (2005, 2006) by *Texas Monthly*, received the Cardiology Fellows "Outstanding Teaching Award" and voted "Best Doctor in Arkansas" for the past several years. Dr. Uretsky is active in coronary, endovascular, and structural heart procedures.

Malek Al-Hawwas, MD – Assistant Professor, Division of Cardiovascular Medicine, UAMS & Interim Director of Interventional Laboratories, UAMS

Dr. Al-Hawwas received his medical degree from Aleppo University Faculty of Medicine in Syria where he completed his medicine internship and then became a chief resident at Northeastern Ohio University College of Medicine. Dr. Al-Hawwas did cardiology training at the University of Montreal/Montreal Heart Institute, in Montreal and a vascular medicine fellowship at Cleveland Clinic. He was performed his interventional cardiology at the University of Arkansas for Medical Sciences (UAMS). His areas of interest are vascular disease, cardiovascular hemodynamics and endovascular interventions.

Subhi Al'Aref, MD - Assistant Professor of Medicine, Division of Cardiovascular Medicine at UAMS

Dr. Al'Aref earned his medical degree at Weill Cornell Medical College in Qatar. He completed his residency in internal medicine and fellowships in cardiovascular medicine and interventional cardiology at New York Presbyterian Hospital and Weill Medical Center in New York. He was a visiting fellow in cardiac imaging at the University of Virginia in Charlottesville. Dr. Al'Aref's focus includes combining interventional and imaging cardiology, both for clinical and research purposes. He is dedicated to translational research. Dr. Al'Aref also researches the uses of artificial intelligence in cardiology and radiology. Dr Al'Aref has published numerous papers and chapters in textbooks. Before coming to UAMS, he was an assistant professor of medicine in radiology.

Shiv Agarwal, MD - Assistant Professor of Medicine, Division of Cardiovascular Medicine, CAVHS and UAMS, Director, Outpatient Cardiovascular Rehab at CAVHS

Dr. Agarwal graduated from Gandhi Medical College in Hyderabad, India and completed his Internal Medicine residency from St Luke's Roosevelt Hospital Center, New York, NY. He was trained in Cardiology and Interventional Cardiology at UAMS before joining as a faculty at UAMS and CAVHS. Dr. Agarwal is active in coronary and peripheral interventional procedures. He is interested in complex coronary and chronic total occlusion interventions. His clinical research involves physiological assessment of the lesion before and after PCI. He currently serves as the Director of Outpatient Cardiovascular Rehab Program at CAVHS.

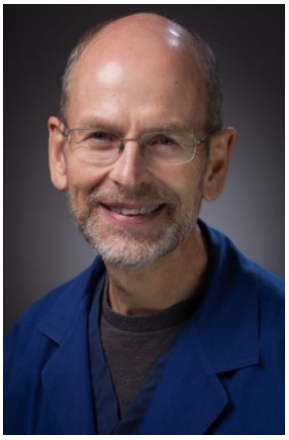
Ian Cawich, MD

Dr. Cawich attended Harding University in Searcy received an MS in Pharmaceutical Sciences at UAMS and went on to attend medical school.

Dr. Cawich completed his internal medicine residency and fellowships in cardiology and interventional cardiology fellowships at UAMS. In 2009 he joined AHH.

Patrick Joseph Flaherty, MD

Dr. Flaherty received his BA from Miami University in 1989, graduating from the Philadelphia College of Osteopathic Medicine, completed his internal medicine residency at Brooke Army Medical Center in San Antonio, TX and his cardiology fellowship at Walter Reed Army Medical Center in Washington, D.C. Dr. Flaherty spent three years as a staff cardiologist at Tripler Army Medical Center in Honolulu, where he was director of cardiology education for the internal medicine residency program. His interests involve all aspects of diagnostic and interventional cardiology, including coronary and peripheral angiography/intervention, nuclear cardiology, echocardiography, and CT angiography. Dr. Flaherty is an active participant in multiple national and international clinical trials, and he is pursuing the implementation of high definition telemedicine to increase patient access to cardiology and vascular medicine services.



D. Andrew Henry, MD

Dr. Henry graduated from Rice University in Houston, TX before attending UAMS. He did his internal medicine residency and cardiology fellowship at UAMS. Dr. Henry practiced general medicine and cardiology in Russellville from 1985 until 1987 before joining AHH.

Wes Lane, MD

Dr. Lane completed his undergraduate studies and medical school at Texas Tech University in Lubbock and Internal Medicine residency, Cardiovascular Disease fellowship, and Interventional Cardiology Fellowship at Baylor Scott and White in Temple, TX. He specializes in cardiac and peripheral vascular interventions and structural heart disease.

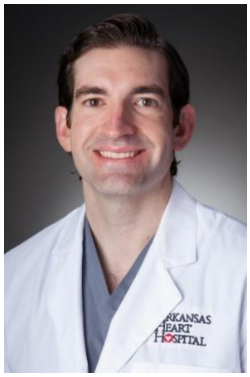
Carl John Leding, MD

Dr. Leding graduated from the University of Central Arkansas prior to earning his medical degree from UAMS in 1993. Dr. Leding completed internal medicine residency at Wilford Hall Medical Center and his cardiology fellowship at Brooke Army Medical Center. Before joining AHH, Dr. Leding worked as a staff cardiologist, flight surgeon and aeromedical consultant at Brooks Air Force Base. Dr. Leding is Board Certified in both Cardiology and Nuclear Cardiology.

Vasili Lendel, MD

Dr. Lendel completed his internal medicine residency and cardiology and interventional cardiology fellowships at Milton S. Hershey Medical Center. Dr. Lendel has been at AHH since August 2011. He is active in coronary and endovascular interventional procedures.

Gary Nash, MD



Dr. Nash graduated from the University of Mississippi and the University of Mississippi School of Medicine. He completed his internship in Internal Medicine at Baptist Health Systems in Birmingham, AL before moving back to Mississippi to complete his Internal Medicine Residency at the University of Mississippi Medical Center. His Cardiovascular Disease Fellowship training was performed at East Carolina University and Interventional Cardiology Fellowship at UAMS. Dr Nash is board certified in Internal Medicine, Cardiovascular Disease, Interventional Cardiology, Adult Echocardiography, Nuclear Cardiology and Vascular Ultrasound.

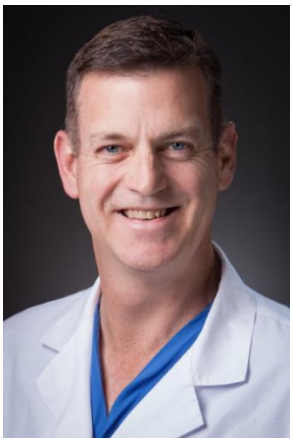
Andre Paixao, MD

Dr Paixao was born in Brazil, He completed his internal medicine residency at Georgetown University Hospital/Washington Hospital Center, followed by a cardiovascular disease fellowship at the University of Texas Southwestern Medical Center. He went on to pursue interventional cardiology training at the Andreas Gruentzig Cardiovascular Center at Emory University. Dr. Paixao's research interests range from Interventional to Preventive Cardiology. He is a member of the National Cardiovascular Registry Data Registry Research & Publications Committee, and Associated Editor for the Acute Coronary Syndromes page at ACC.org. Dr. Andre Paixao is an Interventional Cardiologist practicing at the AHH performing coronary, peripheral and structural interventions.

Vijay Raja, MD

Dr Vijay Raja earned his undergraduate degree in biomedical engineering from Washington University in St. Louis, medical degree from Tulane University School of Medicine in New Orleans and post-graduate training at University of Texas Southwestern Medical Center in Dallas. He is board certified in internal medicine, cardiovascular diseases, interventional cardiology and vascular medicine. He enjoys caring for patients with all forms of heart disease with special interest in treating patients with refractory symptoms and those needing acute interventions. He treats all forms of coronary, structural and peripheral artery disease.

William Rollefson, MD



Director of Interventional Cardiology and Cardiac Catheterization Laboratory, AHH

Dr. Rollefson graduated from Hendrix College in Conway, AR, before earning his medical degree from UAMS. He completed his internal medicine residency at Tripler Army Medical Center in Honolulu and cardiology fellowship at Brooke Army Medical Center in San Antonio. Dr. Rollefson remained at Brooke Army Medical Center for several years as Director of Cardiovascular Interventions before coming to AHH.

Amanda Dozier – Fellowship Coordinator
This position is the key administrative person for the fellowship program. All official program information should be submitted to the coordinator. The coordinator organizes all official fellowship functions. Amanda Dozier is the current fellowship program coordinator. She can be reached by telephone at **(501) 686-7882** office or by email at ***ADozier@uams.edu*** Her office is located in the Shorey building at UAMS in Room 3S/05 (third floor).

Education

Competency Based Education and Evaluation

The ACGME accredits our training program. This accreditation assures that the training our fellows receive is in keeping with today's evolving standards. This standard recognizes that the practice of medicine involves much more than a cognitive awareness of appropriate medical treatments. Appropriate medical training requires that physicians be competent in 6 broad areas. ACGME defines the 6 areas as follows:

a. **Patient Care** that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health
b. **Medical Knowledge** about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care
c. **Practice-Based Learning and Improvement** that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care
d. **Interpersonal and Communication Skills** that result in effective information exchange and teaming with patients, their families, and other health professionals
e. **Professionalism**, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population
f. **Systems-Based Practice**, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value

To assess competency in these areas, a variety of evaluation tools must be utilized, and the results incorporated into ongoing improvement of not only the resident (fellow) but the program as well. Our intent is to develop physicians who are competent across all these areas and to be able to document this progress. Though this process requires ongoing changes, our intent is not to burden our fellows with evaluations and projects unless we expect an educational benefit.

As a fellowship program within UAMS, all UAMS policies and regulations are considered applicable to the Interventional Cardiology Fellowship Program.

Qualifications and Selection of Fellows
This section describes the qualifications for and selection of interventional cardiology fellowship applicants. It should be noted that at this writing, there is no formalized Match Program in Interventional Cardiology that UAMS is a participant.

A. Qualifications

The applicant must have successfully completed an ACGME-certified general cardiology program. Exceptions may be occasionally made if reviewed by the RRC and approved or if there are compelling reasons to do so and conform in all ways with UAMS policies.

B. Selection Process

Applications will be accepted at all times. The selection process will be initiated approximately 12-24 months prior to training start date. The selection process will be well-documented and confidentially conducted.

Candidates will be evaluated using the following criteria:

1. Intellectual capability
2. Previous training
3. Professional achievements
4. Personal characteristics
5. Future potential
6. Long-term goals

The Program Coordinator will review all application packets to ensure that all elements of the application are included. The minimal elements of the application packet include:

a. Completed application form
b. Three (3) letters of recommendation
c. Documentation of training and other regulatory documents as described

The Program Director will review all applications with the Selection Committee. The Committee will determine which applicants will be invited for an interview. After all interviews are completed, the Selection Committee will meet and discuss all candidates interviewed. The candidates will be ranked by the Committee. The Program Director will formally offer a position to the highest ranked candidate and continue making such offers until three candidates have accepted verbally. A formal letter of offer will then be sent via certified mail within 7 days which the candidate must sign and return within 7 days to formally accept the offer. Should the candidate not respond within 7 days, the Program Coordinator or Program Director will contact the candidate and notify the candidate the fellowship offer will not be continued unless the candidate responds in writing within 24 hours using FedEx or other express mail service. If a formal letter is not received within 48 of this notification, the job offer may be rescinded, and the position offered to the next candidate on the ranking list.

Overview of Rotations

Each fellow rotates through service at UAMS, CAVHS and AHH in 1-month blocks. Each fellow will spend a total of four months at each of the co-sponsoring institutions. Each fellow has a continuity clinic at CAVHS and UAMS.

Throughout these rotations, weekly conferences supplement the learning process. All fellows are expected to attend the conferences, regardless of their rotation, with a minimum of 70% required. Failure to attend at least 70% of conferences will result in the loss of division sponsored

conference travel and be considered in determining whether the trainee has successfully completed training.

An interventional cardiology fellow must demonstrate competence in several cardiovascular procedures. As part of this requirement, a minimum number of procedures may be required as described in the ACC competency document. While the division of cardiology tracks most procedures, *it ultimately remains the responsibility of the fellow to track these numbers*.

OBJECTIVES OF ROTATIONS

Cath Lab Rotations

I. To understand the usefulness and limitations of catheter-based interventions in order to properly select patients for these procedures.
(Competencies: PC, MK)

Specific objectives:
Fellows should recognize and assess:

a. The indications, contraindications, and risks of percutaneous coronary interventions in the management of different patients' subsets* within the entire spectrum of ischemic heart disease (from asymptomatic objective ischemia or mild angina to unstable angina and non-ST elevation MI) and of the relative merits and limitations of these techniques, compared to medical or surgical therapies.
*Clinical variables: Age, gender, LV function, presence of DM, etc. Anatomical variables: Single and multi-vessel disease; low, intermediate, or high-risk angiographic features, etc.
(Competencies: PC, MK)

b. The indications, contraindications, and risks of emergency coronary angiography and catheter-based reperfusion techniques in the management of different patients' subsets* with acute ST elevation MI (including the relative merits and limitations of primary and facilitated PCI, post-thrombolytic PCI in selected patients, rescue PCI, and PCI for the treatment of cardiogenic shock, etc.).
Clinical variables: thrombolytic ineligibility, timing of presentation (early and late), age, hemodynamic instability, etc. Anatomical variables: Single and multi-vessel disease; low, intermediate or high-risk angiographic features, etc.(Competencies: PC, MK)*

c. The indications, contraindications, risks, relative merits and limitations of catheter-based procedures in the management of ischemia in patients with prior revascularization (including post-CABG patients with graft disease and post-PCI patients with restenosis). *(Competencies: PC, MK)*

d. The specific applications of adjunctive technologies, such as intravascular ultrasound, and trans-lesional coronary flow velocity and pressure in the assessment of intermediate angiographic lesions and in the guidance of interventional procedures in general. *(Competencies: PC, MK)*

e. The indications, contraindications and risks of percutaneous mitral, aortic, and pulmonary valvuloplasty and percutaneous valve implantation and repair and, when possible, additional catheter-based procedures in the management of different patients' subsets* with congenital or valvular heart disease and of the relative merits and limitations of these techniques compared to surgical therapies.
(Competencies: PC, MK)

*Clinical variables: Age, gender, LV function, presence of DM, etc. Anatomical variables: Single and multi-vessel disease; low, intermediate, or high-risk angiographic features, etc.

f. The indications, contraindications, and risks of endovascular percutaneous catheter-based procedures in the management of different patients' subsets* with congenital or valvular heart disease and of the relative merits and limitations of these techniques compared to surgical therapies.*(Competencies: PC, MK)*
*Clinical variables: Age, gender, LV function, presence of DM, etc. Anatomical variables: Single and multi-vessel disease; low, intermediate, or high-risk angiographic features, etc.

II. Acquire the necessary fund of knowledge and technical proficiency to perform high quality, state of the art interventional cardiac procedures.
(Competencies: PC, MK, PBLI, ICS, SBP, P)

Specific objectives are as follows:

A. Diagnostic catheterization and angiography

B. Interventional Procedures

1) Pre-procedural issues
2) Procedural issues
3) Post-Procedural issue

A. Diagnostic Catheterization and Angiography

ACGME Competency
MK - Medical Knowledge
PC - Patient Care
ICS - Interpersonal &Communication Skills
PBL - Practice-based Learning & Improvement
P - Professionalism
SBP - Systems-Based Practice

1) Acquire additional skills in the performance and interpretation of right and left cardiac catheterization, coronary arteriograms, ventriculography, and hemodynamic studies.
(Competencies: PC, MK)

2) Employ techniques for femoral and brachial/radial vascular access and the cannulation of normal and abnormally located coronary ostia as well as the state-of-the-art performance of coronary imaging.
(Competencies: PC, MK)

3) Recognize and describe clinical and invasive cardiovascular physiology (including pressure waveforms, shunt calculations, blood flow, valve area and vascular resistance calculations).
(Competencies: PC, MK)

4) Demonstrate techniques of endomyocardial biopsy.
(Competencies: PC, MK)

5) Assess the patient's clinical presentation and the angiographic and hemodynamic findings derived from cardiac catheterization to select the appropriate, medical, surgical, or interventional therapy.
(Competencies: PC, MK)

6) Recognize important elements of radiation physics and radiation safety and will assemble a working knowledge of catheterization laboratory equipment, including physiologic recorders, pressure transducers, blood gas analyzers, image intensifiers and other X-ray equipment, cine processing, and digital imaging. *(Competencies: PC, MK)*

7) Recognize the biologic effects and appropriate use of angiographic contrast agents, in order to minimize patient risks, and understand how to prevent and manage allergic contrast reactions upon their occurrence.*(Competencies: PC, MK)*

8) Recognize and demonstrate the techniques of conscious sedation utilized in the performance of diagnostic and interventional catheter-based procedures.
(Competencies: PC, MK)

B. Interventional procedures

1) Pre-procedural issues
a. Act as consultants to the CCU, emergency department, or other inpatient care settings for patients considered for possible or definite intervention and will be involved in the interviewing and physical examination of such patients.
(Competencies: PC, MK, ICS, SBP)

b. Act in the counseling and medical management of patients in preparation for interventional procedures.
(Competencies: PC, MK, ICS, P)

2) Procedural issues
a. Practice the planning and execution of interventional procedures including: the selection and sizing of guiding catheters, guidewires, balloon catheters, and other FDA-approved interventional devices, such as coronary stents and atherectomy devices, as well as alternatives to be used if an initial approach fails. *(Competencies: PC, MK, PBLI)*

b. Perform the key manipulations of the case under direct supervision of the attending. *(Competencies: PC, MK)*

c. Recognize and apply the use of adjunctive diagnostic techniques such as intravascular ultrasound, coronary flow reserve, and pressure measurement. *(Competencies: PC, MK)*

d. Identify the indications and appropriate use adjunctive pharmacological therapies, including antithrombotic, antiplatelet and thrombolytic agents as well as vasodilator, antiarrhythmic, and/or inotropic drugs, as necessary. *(Competencies: PC, MK)*

e. Recognize the indications and appropriately use intra-aortic balloon counterpulsation (IABP), left ventricular assist devices such as Impella, and other hemodynamic support devices (as available) in selected cases. *(Competencies: PC, MK)*

f. Recognize and practice the prevention and management of complications of percutaneous intervention, including coronary dissection, spasm, thrombosis, and no-reflow, coronary perforation and cardiac tamponade; cardiogenic shock; left main dissection, etc. and recognize the role of emergency bypass operation in the management of these complications. *(Competencies: PC, MK, SBP)*

g. Practice the prevention and management of the bleeding complications associated with percutaneous intervention, including bleeding after usage of thrombolytics, heparin, bivalirudin and glycoprotein IIb/IIIa inhibitors, as well as, peripheral vascular complications, such as thrombosis and psuedoaneurysm.*(Competencies: PC, MK, PBLI)*

h. Demonstrate expertise in cardiopulmonary resuscitation and advanced cardiac life support (including being capable of performing temporary right ventricular pacemaker insertion and pericardiocentesis) to be used as necessary in the event of periprocedural cardiac or respiratory arrest.*(Competencies: PC, MK)*

i. Perform at least 250 cardiac interventional therapeutic procedures which from pre-catheterization clinical evaluation to final disposition. *(Competencies: PC, MK, PBLI)*

3) Post-procedural issues
a. Practice the in-hospital care of patients following intervention with emphasis in the management of vascular access site, hemodynamic stabilization and treatment of residual or recurrent ischemia. *(Competencies: MK, PBLI, PC, ICS, SBP, P)*

b. Participate, at least one half-day a week, in the ambulatory follow-up of patients treated with intervention, medicine or surgery and recognize and employ the use of pharmacologic agents appropriate for the management of such patients, with emphasis in the secondary prevention of CAD. *(Competencies: MK, PBLI, PC, ICS, SBP, P)*

III. To promote an outlook of enduring scholarship and analytical thinking required to benefit from experience and assimilate future advancements.
(Competencies: MK, PBLI, PC, ICS, SBP, P)

Specific Objectives:
1) Identify data from major randomized clinical trials and registry experiences and utilize this information in clinical decision-making. *(Competencies: MK, PBLI, PC)*

2) Assist in the identification, enrollment, and management of patients included in cath-lab based randomized clinical trials *(Competencies: PBLI, MK, PC, ICS, SBP)*

3) Recognize and employ the critical analysis of published interventional cardiology data in laboratory and clinical research. *(Competencies: MK, PBLI, P)*

4) Participate in the didactic (core curriculum) and case-based conferences of the Division of Cardiology and the Interventional Service. *(Competencies: MK, PC, PBLI)*

5) Maintain a log of procedures keeping detailed records of the outcomes including any complications identified. *(Competencies: PBL, PC, P)*

6) Participate in monthly Division-wide Quality Improvement/Morbidity and Mortality conferences. *(Competencies: PBLI, PC, SBP, P)*

IV. To commit to professionalism and humanistic integrity in all aspects of medical care and procedure performance. *(Competencies: P, PC, PBLI, ICS, MK, SBP)*

Specific Objectives:
1) Within 24 hours of the procedure and after discussion of the findings with the attending, the fellow will write an interventional procedural report which will be reviewed and signed by the attending and incorporated in the patient's medical record. *(Competencies: SBP, P, ICS)*

2) Strive to be a role model of professionalism and humanistic qualities and participate in the education of fellow, nurses and cath lab personnel.*(Competencies: P, ICS, PC, SBP, PBLI)*

3) Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices. *(Competencies: P, ICS)*

4) Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities. *(Competencies: P, ICS)*

V. To demonstrate an awareness of the larger context and system of health care and apply this knowledge to improve their patient care practice.*(Competency: SBP)*

1) Discuss the role of the care team members with the care providers in the society to help define and outline a team approach that optimizes patient care while controlling cost of care. *(Competency: SBP)*

2) Review and understand Medicare and Medicaid rules and regulations in the area of cardiac related diseases to optimize the delivery of medical care while containing cost of care. *(Competency: SBP)*

3) Operate as the patient's advocate in the area of quality care in helping the patient to deal with system complexities. *(Competency: SBP)*

4) Operate as a partner with health care managers and health care providers to assess, coordinate, and improve health care. *(Competency: SBP)*

OBJECTIVES FOR INTERVENTIONAL OUTPATIENT CLINIC ROTATION

During the training period the fellows manage patients with common cardiac diseases, which include all the varieties of chronic ischemic heart disease (s/p PCI, s/p CABG, s/p MI, chronic stable angina); low risk chest pain syndromes thought to be ischemic in origin; CAD risk factors hypertension, diabetes, hyperlipidemia, obesity, smoking; CHF and/or arrhythmias of ischemic origin, valvular heart disease including mitral and aortic stenosis and regurgitation, intra-cardiac shunts, and all forms of peripheral vascular disease. At the end of the rotation, fellows should be able to:

1. Evaluate referrals from other clinics, interact with patients and perform a routine history and physical exam which is problem oriented. Propose differential diagnosis of the disease and, using supervised decision-making, relate to treatment and investigations including cardiac catheterization with coronary angiography and revascularization as required. *(Competencies: ICS, MK, PC, PBLI)*

2. Perform EKG analysis, as necessary, to identify common EKG abnormalities including: Q waves; ST segment and/or T wave changes, ischemic or non-specific; ventricular hypertrophy; conduction abnormalities; and/or arrhythmias, etc. *(Competencies: MK)*

3. Analyze other non-invasive cardiac tests including: echocardiograms; exercise or pharmacological stress testing; nuclear perfusion scans; CT scans (calcium scores, CT angiogram); magnetic resonance; PET scan, ABIs, peripheral ultrasound Dopplers, etc., as well as previous coronary angiogram or PCI results, in other to guide further management of patient care. *(Competencies: MK, PC)*

4. Formulate evidence-based treatment strategy based on available literature. Discuss treatment with the patient to assist them in making informed treatment decisions. *(Competencies: MK, PC, ICS, PBLI)*

5. Identify and analyze hypertension in outpatient setting. Fellow should differentiate between essential and secondary forms of hypertension, order relevant tests and initiate treatment. *(Competencies: MK, PC)*

6. Identify and analyze hyperlipidemia, interpret fasting lipid profile results. Plan treatment based on test results according to available clinical guidelines, order appropriate follow up lab tests (e.g. LFT's, HbA1c, thyroid profile, etc). *(Competencies: MK, PC)*

7. Identify and analyze diabetes and metabolic syndrome in the outpatient setting, differentiating between insulin dependent and non-insulin dependent diabetes. Recognize the importance of micro-albuminuria as a risk marker of these patients and the value of monitoring kidney function. Aggressively manage hypertension and hyperlipidemia in these patients, according to established treatment guidelines. Recognize the implications of diabetes in the selection of revascularization therapies for patients with multi-vessel disease. *(Competencies: MK)*

8. In anticipation to cardiac catheterization the fellows will appropriately identify and analyze elevated serum creatinine; Recognize the pre-renal, renal and post-renal causes; and how to reach a differential diagnosis and optimize treatment. *(Competencies: MK, PC)*

9. Likewise, in the above setting, evaluate pre-cath patients for other conditions such as bleeding, contrast allergy, etc. to anticipate problems that might be encountered during cardiac catheterization. *(Competencies: MK)*

10. Recognize the cause of progression of coronary artery disease and pharmacological and non-pharmacological interventions that favorably modify it. *(Competencies: MK)*

11. Recognize the risk factors and clinical presentation of restenosis and sub-acute thrombosis following PCI and institute the appropriate management. *(Competencies: MK)*

12. Participate in the nutritional management of outpatients including the institution of weight loss diets, salt restriction and diets aimed at the optimization of lipid levels. *(Competencies: MK, PC, ICS)*

13. Manage other problems occasionally seen in patients post percutaneous coronary revascularization such as: hematoma, pseudoaneurysm and other vascular access complications; anemia; easy bruising (*Competencies:MK,PC)*

14. due to anti-platelet agents; creatinine elevation due to contrast nephropathy; allergies to aspirin hypercholesterolemia; radiation dermatitis etc. *(Competencies: MK, PC)*

15. Manage incompletely re-vascularized patients with multi-vessel disease who may be candidates for staged PCI. *(Competencies: MK, PC)*

16. Increase knowledge base by patient and clinical problem-based learning, review of literature, textbooks, and discussion with faculty. *(Competencies: MK, ICS, PBL)*

17. Engage in scholarly pursuits including participation in ongoing clinical projects as well as design of small pilot projects by the fellows. *(Competencies: MK)*

18. Evaluate valvular abnormality and formulate a plan of evaluation and treatment. *(Competencies: MK, PC, PBL)*

19. Evaluate patients for peripheral vascular disease and formulate a plan of evaluation and treatment. *(Competencies: MK, PC, PBL)*

20. Evaluate patients with hypertrophic cardiomyopathy and formulate a plan of evaluation and treatment. *(Competencies: MK, PC, PBL)*

Conferences

A wide variety of clinical conferences and didactic lectures ensure successful preparation of each fellow for the Board Certification in Interventional Cardiology and to supplement the education they have already received in Cardiovascular Medicine.

Fellows will be required to attend conferences on all rotations and present several times throughout the academic year.

Conferences include the following:

1. Interventional Cardiology Core Curriculum: This conference is held weekly and covers all the major aspects of interventional cardiology. Attendance is mandatory. Thurs, 7-8 AM

2. Clinical Case Conferences: This conference is held weekly and presents interesting and educational cases performed during within the program. Attendance is mandatory. Thurs 4-5 PM

3. Interventional Cardiology Journal Club: This conference is held bi-monthly and is integrated into the Core Curriculum meeting. The trainee presents an important interventional cardiology article, typically of potentially practice-changing import, with one of the faculty acting as mentor. Attendance is mandatory. Thurs 7-8 AM

There are also Cardiovascular Disease Conferences which the interventional cardiology trainee is encouraged to attend. These include the following:

1. ECG Conference: weekly – Fri, 7-8AM

2. Echocardiography conference – bi-weekly

3. Cardiology Grand Rounds Weekly, Wednesday, 12-1 pm. This lively and popular conference involves discussion of patient management and other topics of mutual interest to cardiologists and cardiothoracic surgeons.

4. Quality Improvement/Morbidity & Mortality:
Designed to improve fellow training and patient care, this conference is held the last Friday of each month from 1200-100 PM, Location: CAVHS 5C-114. Detailed assessments of adverse events and procedure complications are discussed. All fellows are responsible for obtaining their numbers for procedures, complications, etc., prior to conference.

5. Combined Cardiology-Cardiac Surgery Conference- Bi-weekly, Tues 4-5 pm

The program recommends that interventional cardiology fellows attend, when possible:
Internal Medicine Grand Rounds: Held every Thursday in the Education II Building G/141, from 1200-100 PM, this conference is given by a UAMS faculty member or an invited guest speaker.

Research and Scholarly Activity

Every fellow must complete at least 1 scholarly project during the fellowship. The program director must approve this project and have a faculty mentor. Scholarly activities include investigative research in the basic sciences or clinical arena. In these cases, the goal of the research would be the submission of

an abstract for one of the major cardiology meetings and publication of the research in a peer reviewed journal. Such research is not the only way to complete this requirement. Fellows may elect to conduct a literature review or case report with a view toward presentation or publication of the results.

Each fellow will have a mentor of his or her choosing to assist them in developing a research project and to acclimate to the fellowship. These projects will be reviewed during a fellow's periodic evaluations. Ultimately the program director will determine if a project completes this requirement.

Other Assignments
In addition to clinical responsibilities, the fellows are responsible for completing other projects within the curriculum. These projects are an essential part of the training program and must be satisfactorily completed in a timely manner.

Procedure Logs
An interventional cardiology fellow must demonstrate competence in a number of cardiovascular procedures. As part of this requirement, a minimum number of procedures are required. While the division of cardiology tracks most procedures, it ultimately remains the responsibility of the fellow to track these numbers through New Innovations.

EVALUATIONS

Proper evaluation is essential for the growth and development of both the trainees and the program itself. These evaluations provide a marker by which to plan future improvements.

Fellows will be evaluated using a variety of methods. These include faculty evaluations that are completed at the end of each rotation using the New Innovations tool. In addition, the Program Director will provide the fellow a 6-month evaluation during his/her training and a final evaluation at the end of the training period. A 360 evaluation collects input from nurses, technicians, and administrative staff with whom fellows interact. Patient surveys are also incorporated into the evaluation summary of the fellow. Select conference presentations will also be evaluated through survey.

In addition, the program director will incorporate input from individuals both within and outside the division who have had a chance to interact with a fellow. Content from scholarly activities and learning assignments previously described will be incorporated into a composite evaluation. As noted above, the program director will discuss these evaluations with the fellow every 6 months.

The program evaluation is as critical as the fellow evaluations. The needs of our trainees change constantly requiring the program to change. Only by the feedback that we get through program evaluation tools can we insure those changes lead to a better program for our fellows. Fellows evaluate each rotation at the end of the rotation, providing information about their learning experience. The fellow's annual survey also provides feedback on a broad range of critical program issues. In addition, the fellowship committee
regularly reviews information from internal and external sources that reflect on our teaching. Our goal of excellence in cardiovascular training requires this continual cycle of program analysis and improvement.

General Information

Professional Conduct

The medical profession is a noble calling. Our society offers medical professionals a high degree of respect, but that respect deserves to be earned by careful attention to compassionate care of patients and respect for all with whom we associate. Medical care requires much more than accurate diagnosis and treatment; it requires that we value those with whom and for whom we work and that we meet our

responsibilities toward them. Professional behavior does not replace competent medical decision-making. It joins with such decision-making to form well-rounded medical care.

In no way could this handbook adequately explore the meaning of professionalism, nor could the program ever adequately evaluate all aspects of this competency. But as we attempt to provide an environment that fosters professional development, this program has identified the following key aspects of professional behavior that it will emphasize over the course of training. Each of these will have bearing on your professionalism evaluation. Professionalism in the interventional cardiology fellowship incorporates current UAMS policies, including, but not limited to, Policies 1.500 "Appropriate Treatment of Residents in an Educational Setting", 3.01.05 and UAMS "Code of Professional Conduct".

Respect

Despite the difference between us, all humans deserve to be treated with respect. Interactions with our patients, their families, our colleagues and staff should be marked with courtesy and civility. Derogatory or demeaning comments (even those made outside the hearing of the subject) betray our patient's trust and disrupt the work environment. Even when disagreements exist, our goal is not to belittle another but to find ways to work together within the adversity.

Service & Patient Care

Medicine is a serving profession. Our patients and colleagues come to us with problems in hopes of assistance. Often our expertise in cardiology is needed to solve these problems; sometimes the solution lies
outside the realm of cardiology. In all cases fellows should do what they can to offer assistance. This may involve directing the inquirer to a different resource; it may involve educating a provider in some area. It does not require us to answer requests in a way that squanders resources (either of time, materials or money), nor does it require that we do another's work for them. An attitude of service does keep us responsive to addressing the true needs around us. If any situation seems to regularly abuse the assistance cardiology offers, it should be referred to the program director. Service may extend beyond

the domain of the cardiovascular fellowship. Making the program director aware of service activities outside the fellowship program will assist in a more accurate evaluation of this competency.

Responsibility
Cardiovascular specialists are among the most highly trained members of the medical community. We deal with some of the most life threatening of medical conditions. As a result, we receive great respect and incur great responsibility. This requires that we follow through on clinical responsibilities. Cardiologists cannot afford inattentiveness or sloppiness in patient management and they must be diligent to arrange for patient care needs upon transfer or in their absence.

Some areas of responsibility are more mundane but nonetheless important. Though fellow's clinical documentation requirements may not be as extensive as those of the residents, fellows must ensure that they are familiar with their patients and that their documentation is timely and complete. Fellows are expected to have all medical records, orders, and reports completed within 1 week (or less when required by hospital policy). Similarly responding to pages or handling messages and correspondence within an appropriate time frame is likewise critical. Fellows also have the responsibility to take their learning seriously. This necessitates attendance at division conferences (except when urgent patient care

responsibilities exist) and the completion of other learning assignments. Tardiness in these areas will impact one's professional evaluation.

Role-modeling
In a culture that has adopted poor dietary and activity habits, healthcare professionals must not only advocate but also practice a healthy lifestyle. While some will adhere to more strict standards than others, the importance of physicians incorporating some of their prescriptions into their own lives cannot be understated. The program will encourage each fellow to articulate and follow appropriate dietary and exercise choices.

Professional Appearance
First impressions are important. Rightly or wrongly patients usually make their initial assessment of their physician based on appearance. They have little else to go on. Because of this, our program members will strive to present ourselves in attire that engenders confidence and helps establish trust. For this reason, cardiology fellows should dress at all times in a manner that our patients consider professional.

Our intent with such a policy is not to inhibit freedom of expression, require an expensive wardrobe, or promote a rigid dress code. A physician's attire should be considerate of values held by his or her patients. Thus, it should not be too ornate or relaxed. It must not be distracting or provocative. It should be appropriate for the work at hand and not present safety concerns for either the physician or the patient.

A few general guidelines may help define reasonable parameters in cardiology. Fellows should wear scrubs only on days in which the majority of their day will be spent performing procedures. In this case, they should wear their white coat when outside the cath lab area. During normal business days, fellows would be expected to dress in business attire (men with a dress shirt, slacks, and tie; women with a dress or sweater/blouse and skirt/slacks). On weekends and holidays, business casual is appropriate (men with collared shirt and slacks; women blouse/shirt and skirt/slacks). In general, informal attire such as jeans, T-shirts, athletic wear, shorts, and sneakers are not appropriate. Body piercings (with the exception of earrings) are also discouraged. Fellows should consider their attire, but attention to dress should never compromise patient care.

In a similar fashion, hair should be well groomed and clean. It should not interfere with eye contact between the doctor and patient, nor should it create a distraction or potentially impair safety. Men should appear clean-shaven or maintain a well-groomed beard and/or moustache. The program director may grant exceptions to some of these rules on a case by case basis to accommodate established cultural or

religious practices. Cardiology faculty will have the authority to request that a fellow change their attire if they feel it inappropriate based on the above criteria.

Communication & Interpersonal Skills

E-mail is the official means for transmission of information within the division of cardiology and between the College of Medicine Dean's Office/Director of Housestaff Records and all fellows. E-mail information and instructions are regarded the same as any written hand copy and will often be the only form in which this information is delivered. All fellows have an electronic mailbox in the UAMS e-mail system and are members of the COMHS Group distribution list maintained by the Director of Housestaff Records. **Each resident/fellow is responsible for regular (e.g. every 3rd business day) checks of his/her e-mail.**

It is imperative that Fellows are able to be reached when necessary. The primary point of contact between the outside world and Fellows are the Cardiology offices at UAMS and the VA and the Fellowship Coordinator's office at UAMS. These offices receive calls regarding everything from consult requests to personal communications and must be able to reach the Fellows within a reasonable period

of time. They also disseminate pertinent reminders and information to assist the Fellows in both the educational and administrative requirements of their position. When more immediate communication is necessary, Fellows will be called or paged. Sometimes, circumstances dictate that a Fellow cannot return a call or page immediately, but an effort must be made to return calls and pages in a timely manner. Timely is defined as within 15 minutes. Arrangements can be made with staff to answer pages in during procedure intensive rotations. If a piece of hospital-provided communication equipment is not working properly, notify the Fellowship Program Coordinator immediately so steps can be taken to repair or replace the equipment.

Call

Call schedules are typically published two weeks prior to the start of each month, with call being assigned to the Interventional Fellows on a rotating basis for one-week time periods. The cardiology office should be made aware of any changes in the call schedule.

While on call, fellows are responsible for the following:

- Field all phone calls to the interventional cardiology service
- Evaluate and write a note on all emergency consults
- Perform or assist in all emergency catheterization procedures
- Provide follow-up information to the appropriate services in a timely fashion.

Two cardiology faculty members will always be available to assist the on-call fellow as necessary. The non-invasive faculty member will field most of the calls, unless the issue involves or potentially involves an invasive procedure. A faculty member should be notified of all CCU admissions and emergency consults within an appropriate time frame. He should also be notified of any serious changes in the status of patients on the cardiology service or at any time a fellow has questions regarding the management of a problem referred to him. The Interventional Cardiology faculty is responsible for all emergency catheterization and interventional procedures.

Fatigue, Impairment and Duty Hours
The program director will ensure that interventional cardiology fellows are aware of the signs of fatigue and impairment and the approach to a fellow or faculty member who is excessively fatigued or impaired. If any interventional cardiology fellow or faculty member identifies a fellow or faculty member who shows signs of fatigue sufficient to impair patient care or if he or she fatigued, he/she is to report it to the program director so that appropriate coverage can be arranged. The program director will investigate the details of this occurrence and report his findings to the fellowship committee to determine the need for changes to prevent excessive fellow fatigue (see appendix).

The cardiology program takes the issue of duty hours seriously. Each fellow must get an average of 1 day a week free from program responsibilities. Furthermore, the average workweek should never exceed an average of 80 hours (when averaged over a month). The fellow should immediately notify the program director if these limits are in danger of being exceeded.

Moonlighting*

Internal Moonlighting: Internal Moonlighting for 2020-2021 is limited to the VA.
External Moonlighting: **Available**. However, fellow must receive written approval from Program Director prior to external moonlighting. Additionally, he/she must provide moonlighting supervisor's contact information (email, cell phone, address) as well as address and phone number of the external facility. Lastly,fellow must send monthly log of hours worked at a facility (cannot exceed 60 hours of moonlighting per month). Moonlighting is a privilege and all fellows must have the program director's signed approval for all moonlighting activities. This applies even to activities for which the fellow may receive no monetary compensation. This privilege may be revoked if fellows are unable to meet the

demands of the program. The policies for moonlighting are established and set forth in the GME Committee policy manual. Because duty hour requirements extend to all work done inside or outside our educational institution, the total number of hours worked in and out of the program must average less than 80 hours per week. Fellows should not be involved in more than 60 hours of moonlighting per month.

Leave Requests
Fellows receive **15** business days of paid vacation during the one-year Interventional Cardiology fellowship. Every effort should be made to take this leave during rotations that do not require back-up coverage by a fellow. The yearly rotation schedule will be developed to accommodate as many of the leave requests as possible. Completed leave request form(s) must accompany all requests for leave and must be submitted electronically or on paper form **and** be approved by the Program Director. Generally, vacation requests should come in 1-week blocks. The program director must grant special permission to any leave request greater than 1 week in duration, those involving travel outside the country, or those requested during the last month of the academic year.

All vacation leave requests must be completed using the most current Cardiology Fellow Leave Form and electronically or on paper requested for the program director's approval 3 months prior to the proposed leave. Fellows must follow the Cardio-Renal Fellow Leave Request Instructions and complete the Cardio-Renal Leave Checklist. Submitting leave form is the beginning of the approval process, not the final step. **No** vacation requests will be approved between June 15-30.

Professional Leave
Time spent taking board exams will not be counted against vacation time. All leave requests for educational activities are subject to the approval of the program director. Educational leave may be approved for up to 5 business days a year. Requests for such leave should be made in writing to the

program director who will review the request. All educational leave requests must be completed using the most current Cardiology Fellow Leave Form and electronically requested for the program director's approval 3 months prior to the proposed leave. Fellows must follow the Cardio-Renal Fellow Leave Request Instructions and complete the Cardio-Renal Leave Checklist. Submitting leave form is the beginning of the approval process, not the final step.

Sick/Parental Leave
Fellows have **12** days of leave (including weekend days) for medical reasons. Sick leave in excess of 12 days requires special review by the Assistant Dean and Program Director. Family Medical Leave (paid and unpaid) may be granted to care for a newborn child or seriously ill spouse, child or parent. If the total vacation, leave without pay and sick leave exceeds 1 month for any year in training, the ABIM requires an extension of the training to compensate for the loss of time in the training program. Fellow must notify or have someone notify on your behalf the Program Coordinator, Leave Administrator, VA Cardiology Office, Rotation Supervisor(s) Program Director & any other pertinent staff immediately upon your knowledge of any missed or partially missed day(s) of work. If less than 90 days' notice, Division & Department Director approval is required. Find coverage or have someone find coverage on your behalf for your clinic, rotation, day & night duties.

Pregnancy
Accommodations will be made to limit radiation exposure to any fellow who is or may be pregnant. It will be the responsibility of the fellow to notify the program director of this possibility. At that point, the program director will modify the fellow's responsibility to appropriately limit radiation exposure. Such a modification may impact the duration or content of fellow's training.

Other Benefits, Terms, and Conditions
Financial Support
Stipends for residents and fellows are competitive with other institutions in the southern region.

Drug Testing Policy
UAMS has developed a drug testing policy, which includes all incoming fellows. The policy requires that all housestaff (interns, residents, fellows) accepted into a training program at UAMS submit to & pass a drug screening prior to employment. Employment (or acceptance for the training program) will be finalized only upon completion of negative drug screen. The test should be taken 1 or more weeks before July 1 to allow the results to be reported prior to July 1.

Liability Coverage
The University of Arkansas for Medical Sciences, through the Medical College Physician's Group, provides each resident with medical professional liability coverage for their activities within the residency/fellowship program. The coverage is written on a claims-made basis. Each resident/fellow is provided coverage in the amount of $500,000 per medical incident with an annual aggregate of $1,000,000. In addition to the limits of liability, the cost of legal defense is also provided. Hence, each resident/fellow is protected against claims for medical negligence for acts and/or omissions surfacing as a result of their UAMS COM approved activities. The coverage provided does not extend to activities outside the residency program. For this reason, **any resident involved in moonlighting activities should secure their own professional liability coverage** for the outside activities. For more information on Risk Management and Prevention contact the Faculty Group Practice Risk Management Department at 614-2077.

Medical, Dental, and Life Insurance
Fellows are eligible for medical, dental, and life insurance. Contact the Office of Human Resources for options at 501-686-5650.

Laundry
White lab coats are provided at the beginning of the academic program for the entire residency period. The department provides laundry service. Laundry is picked up on Tuesday's and Friday's; coats must be placed in the laundry basket in the Cardiology office.

Counseling/Psychological Support Services
The Employee Assistance Program (EAP) provides professional counseling and/or referral to community resources for a wide range of problems and situations including stress management, financial concerns, alcohol and other drug abuse, elder care, job/career issues, parenting, legal issues, marital/family problems and personal/emotional concerns. UAMS has prepaid the entire cost of the program so that the fellow is not required to make any contribution within the EAP. However, if the fellow is referred to a community resource, that person will be responsible for the cost. For further information please go to: http://www.uams.edu/aeap/

Employee Health/Student Preventive Health Services (EH/SPHS)
The EH/SPHS provides the MMR vaccine, an annual TB skin test and chemoprophylaxis medication if indicated following blood or body fluid exposures for residents/fellows. All residents/fellows must have a TB skin test annually while in the program.

International Medical Graduates (IMG)
Visas are handled through the Office of Human Resources (OHR). Phone 501-686-5650. The OHR also provides an International Medical Orientation Handbook which contains useful information about the

US and Arkansas culture. Training programs may assign incoming residents/fellows a mentor within the department who assists with the acclimation process.

Restrictive Covenants
Fellows in programs sponsored by the UAMS COM are not required to sign any type of non-competition guarantee.

Closure/Reduction
In the event that the College of Medicine and/or the Program Director decide to reduce the number of fellowship positions in any program, the fellows will be notified immediately. An attempt will be made to reduce the number of positions over a period of time so as not to affect the fellows currently in the program. If this is not possible, the Program Director will assist the fellows in obtaining a position in another fellowship program.

Cardiac Life Support Certification
Fellows must maintain current BLS and ACLS certifications. Each fellow must supply the date of current certification to the program coordinator.

Use of Records for Educational Research
Many UAMS COM faculty members and staff are engaged in on-going efforts to monitor and improve the undergraduate and graduate medical school curriculum. In addition, our accrediting agencies expect us to assess ourselves on an on-going basis and participate in the community of scholars sharing what has been learned. The public dissemination of knowledge is one of the responsibilities of our profession.

To this end, such things as test scores, faculty and preceptor ratings, clinical skills and other performance-based assessments, and follow-up surveys and evaluations will be analyzed to address such questions. If the information is released publicly, it is only released in an aggregated form to maintain confidentiality. Individual students and residents/fellows are not identified.

Personally identifiable information is kept confidential, and the privacy of students and residents/fellows is protected to the maximum extent allowed by law. If you have any questions concerning this policy, please contact the Associate Dean for Graduate Medical Education.

Sexual Harassment and Anti-Discrimination
The University of Arkansas for Medical Sciences is committed to providing an academic and employment environment that fosters excellence. Harassment of any kind, racism and discrimination subvert this mission and will not be tolerated. All students, residents/fellows, physicians and other staff and employees shall abide by the institutional policies.

UAMS Drug-free Awareness Statement & Practitioner Health Questionnaire
At the beginning of the program, all fellows receive the UAMS Drug-free Awareness Statement and acknowledge receipt by signing the receipt form and returning it to the Director of Housestaff Records. All fellows must complete the Practitioner Health Questionnaire and return it to the Associate Dean for GME. This questionnaire is updated yearly at the time of contract renewal. Questionnaires are confidential. Questionnaires with concerns are reviewed by the UAMS or ACH Medical Staff Health

Committees, which recommend a plan of action/follow-up for the fellow and reviews this with the respective program director and departmental chairperson.

Resident Organization/Resident Council: All residents/fellows are automatically members of the Resident Organization. The leadership body is the Resident Council. The Chair and Vice-Chairs of the

Resident Council are peer-elected and represent the Resident Organization on the Graduate Medical Education Committee.

Signs and Symptoms of Fatigue or Impairment

Signs and symptoms of impairment may include, without limitation, the following:

1. Physical signs such as fatigue, deterioration in personal hygiene and appearance, multiple physical complaints, accidents, eating disorders.

2. Disturbance in family stability or evidence of personal or professional relationship difficulties with resulting isolation.

3. Social changes such as withdrawal from outside activities, isolation from peers, embarrassing or inappropriate behavior at parties, adverse interactions with police, driving while intoxicated, undependable and unpredictability, aggressive behavior, argumentative, or unusual financial problems.

4. Professional behavior patterns such as unexplained absences, spending excessive time at the hospital, tardiness, decreasing quality or interest in work, inappropriate orders, behavioral changes, altered interactions with other staff, inadequate professional performance or significant change in well-established work habits.

5. Behavioral signs such as mood changes, depression, slowness, lapses of attention, chronic exhaustion, risk taking behavior, excessive cheerfulness, and flat affect.

6. Signs of drug use or alcohol abuse such as excessive agitation or edginess, dilated or pinpoint pupils, self-medication with psychotropic drugs, stereotypical behavior, alcohol on breath at work, uncontrolled drinking at social activities, black outs, binge drinking, changes in attire (e.g., wearing of long sleeve garments by potential drug users).