

**MARSHALL UNIVERSITY SCHOOL OF MEDICINE**  
**CARDIOLOGY FELLOWSHIP**  
**TRAINING PROGRAM**

LETTER OF AGREEMENT FOR THE COOPERATIVE TRAINING OF  
RESIDENTS/FELLOWS FROM MARSHALL UNIVERSITY JOAN C.  
EDWARDS SCHOOL OF MEDICINE (MUSOM) AND ADVANCED  
CARDIOVASCULAR SERVICES (ACVS).

This letter of agreement is an educational statement that sets forth important points of agreement between Marshall University School of Medicine (MUSOM) and Advanced Cardiovascular Services (ACVS). This statement of educational purpose does not affect current contracts and institutional affiliation agreements between the two institutions.

This Letter of Agreement is effective from July 1, 2019, and will remain in effect for five (5) years, or until updated, changed, or terminated by the MUSOM Cardiology Fellowship Training Program and/or Advanced Cardiovascular Services. Such changes must be communicated with the MUSOM Office of Graduate Medical Education.

**1. Persons Responsible for Education and Supervision**

At MUSOM: Ellen Thompson, M.D., Program Director,

At ACVS: Ganpat Thakker, MD, Director - ACVS

As program director, Ellen Thompson, M.D. is ultimately responsible for the content and conduct of the educational activities at all sites, including ACVS.

Ganpat Thakker, M.D., is responsible for the day-to-day supervision and oversight of fellow activities at (ACVS). This includes such activities as scheduling conferences, sick leave, annual leave and evaluations, conflict resolution, etc.

**2. Educational Goals and Objectives**

The following goals and objectives will guide the residents training while assigned to the ACVS. The resident should be given the opportunity:

- a. to experience the philosophy and approach of stress echocardiography by Dr. Thakker;
- b. to enhance technical skills under direct supervision and guidance of experienced operators; in the acquisition of stress echocardiography.
- c. to enhance exposure to stress echo procedures; and meet the requirements for ASE certification.
- d. to provide experience with stress echocardiography in a private physicians office;
- e. to observe the trainee in a high volume clinical practice setting, and provide advice and support to enhance cardiovascular training with assistance in understanding current private practice models.
- f. to assist in generating at least one case report for peer review publication, participation and involvement in ongoing multi-center trials as well as operator initiated investigational protocols.

## **2. Responsibilities**

The faculty at ACVS must provide appropriate supervision of residents/fellows in patient care activities and maintain a learning environment conducive to educating the residents/fellows in the ACGME competency areas. The faculty must evaluate resident performance in a timely manner during each rotation or similar educational assignment and document this evaluation at completion of the assignment.

## **3. Content and Duration of the Educational Experiences**

The content of the educational experiences has been developed according to ACGME Residency/Fellowship Program Requirements and are delineated in the attached goals and objectives for each rotation.

As program director, Dr. Ellen Thompson is ultimately responsible for the content and conduct of the educational activities at all sites, including ACVS. The program director, Participating Site director and the faculty are responsible for the day-to-day activities of the residents/fellows to ensure that the outlined goals and objectives are met during the course of the educational experiences.

Rotations may be in two (2) week blocks, but generally rotations are a month in duration.

The day-to-day supervision and oversight of resident/fellow activities will be determined by the specialty service where they are assigned. Nancy Floyd, Program Administrator, is responsible for oversight of some resident/fellow activities, including coordination of evaluations, arrangements of conferences, sick leave, annual leave and benefits.

#### **4. Assignments**

MUSOM will provide to ACVS the name of the resident(s)/fellow(s) assigned to the site, the service they will be training on and other relevant information. Residents/fellows will remain on MUSOM's payroll; remain eligible for all resident benefits, including annual leave, sick leave, and health insurance, etc. Resident's will be covered under MUSOM'S malpractice policy in the amount of one million dollars per occurrence. The policy also provides tail coverage and legal defense.

#### **5. Responsibility for supervision and evaluation of residents**

Residents will be expected to behave as peers to the faculty, but be supervised in all their activities commensurate with the complexity of care being given and the resident's own abilities and level of training. Such activities include, but are not limited to the following:

- Patient care in clinics, inpatient wards and emergencies
- Conferences and lectures
- Interactions with administrative staff and nursing personnel
- Diagnostic and therapeutic procedures
- Intensive Care Unit or Ward patient care

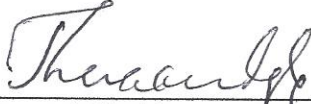
The evaluation form will be developed and administered by the Cardiology Fellowship Training Program. Residents will be given the opportunity to evaluate the teaching faculty, clinical rotation and Participating Site at the conclusion of the assignment.

#### **6. Policies and Procedures for Education**

During assignments to ACVS, residents/fellows will be under the general direction of MUSOM's Graduate Medical Education Committee's and the Cardiology Fellowship Training Program's Policy and Procedure Manual as well as the policies and procedures of the Participating Site for patient confidentiality, patient safety, medical records, etc.

**7. Authorized Signatures**

**Advances Cardiovascular Services**

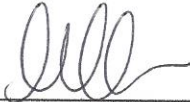


Dr. Ganpat Thakker  
Supervising Physician/Site Director  
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Charleston, WV 25304  
(304) 345-5460

2-25-2019

Date

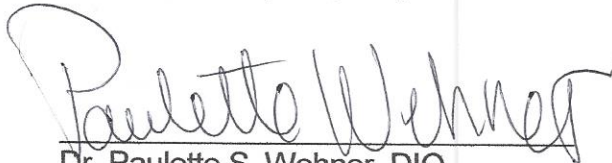
**MUSOM**



Dr. Ellen Thompson, Program Director

1/31/19

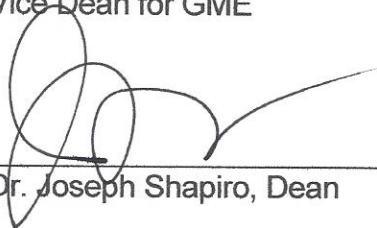
Date



Dr. Paulette S. Wehner, DIO  
Vice Dean for GME

1/31/19

Date



Dr. Joseph Shapiro, Dean

3/21/19

Date

## Goals and Objectives for the MUSOM Cardiology Fellowship Training Program

### LEVEL I

In the first year of the Cardiovascular Disease Fellowship Program, the Fellow is expected to develop understanding and skills in virtually all areas of clinical cardiology. The first year is relatively equally divided between the Veterans Affairs Medical Center, St. Mary's Medical Center and Cabell Huntington Hospital including the PM Consult Rotation.

	GOALS	Patient Care	Medical Knowledge	Practice-Based Learning & Improvement	Interpersonal & Communication Skills	Professionalism	Systems-Based Practice
1.	Provide training in general consultative cardiology	X	X	X	X	X	X
2.	Provide a basic understanding of echocardiography	X	X				
3.	Provide a basic understanding of appropriate use of diagnostic testing and use of results	X	X				X
4.	Provide adequate exposure to the Cardiac Catheterization Suite to a significant comfort level	X	X				X
5.	Provide an environment of life-long learning			X			
6.	Provide strong conference time to apply the basic Cardiovascular Medicine fund of knowledge		X	X			X
7.	Provide adequate critical care training to be comfortable as a consultative Cardiologist in critically ill patients	X	X		X		X
8.	Provide one month of research time to design and institute a project			X			

**Level I**

	<b>Objectives</b>	<b>Patient Care</b>	<b>Medical Knowledge</b>	<b>Practice-Based Learning &amp; Improvement</b>	<b>Interpersonal &amp; Communication Skills</b>	<b>Professionalism</b>	<b>Systems-Based Practice</b>
1.	The fellow should be comfortable assuming the role of a consultant	X	X	X	X	X	X
2.	The fellow should be able to perform a cardiac catheterization independently.		X				
3.	The fellow should be able to adequately triage and provide appropriate emergency cardiac care	X	X		X	X	X
4.	The fellow should have committed to become a life-long learner in medicine			X		X	
5.	The fellow should have basic echocardiography interpretive skills		X				
6.	The fellow should have independent skill in EKG interpretation, Holter monitoring interpretation	X	X				
7.	The fellow should be comfortable with preoperative consultative assessment	X	X		X	X	X
8.	The fellow should be comfortable in a Continuity Clinic setting	X	X	X	X	X	X
9.	The fellow should be comfortable with communication with consulting				X	X	X
10.	The fellow will competently complete an EHR note with						

	communication to the consulting physician					X	X
11.	The fellow will have either established a basic science research project or completed a basic science project design including IRB approval			X			

**LEVEL II**

The second year of training in Cardiovascular Disease Fellowship specifically deals with the consultative skills developed in the first year. The Level II Fellow not only moves to more advanced cardiac catheterization studies but also spends a significant amount of time in non-invasive performance of studies as well as interpretation. Electrophysiology is introduced in this year as is nuclear interpretation. The second year Cardiovascular Medicine Fellow is also given additional research time, hopefully to institute the project designed and initiated in the first year.

	GOALS	Patient Care	Medical Knowledge	Practice-Based Learning & Improvement	Interpersonal & Communication Skills	Professionalism	Systems-Based Practice
1.	Complete rotation in non-invasive testing including tilt table testing, transesophageal and transthoracic echocardiography	X	X				X
2.	Develop skills in the appropriate use of nuclear stress studies and their interpretation	X	X				X
3.	Perform and interpret complicated diagnostic left heart catheterization studies	X	X				X
4.	Expose the fellow to interventional patients and participation in interventional procedures	X	X				
5.	Continue to						

	improve cardiovascular consulting skills as derived largely from the electrophysiology rotation including evaluation of syncope, complex dysrhythmias, and tilt table testing	X	X	X	X	X	X
6.	Initiate enrollment and aggressive work on their respective research project			X	X		

**Level II**

	<b>OBJECTIVES</b>	<b>Patient Care</b>	<b>Medical Knowledge</b>	<b>Practice-Based Learning &amp; Improvement</b>	<b>Interpersonal &amp; Communication Skills</b>	<b>Professionalism</b>	<b>Systems-Based Practice</b>
1.	Enrollment in their respective research projects should have been initiated			X			
2.	Level I to II nuclear interpretive skills	X	X				
3.	Complete comfort level with both exercise and pharmacologic stress testing.	X	X			X	X
4.	Independently performed graft studies and other high-risk cardiac catheterizations such as brachial approach	X	X				X
5.	Appropriately evaluate the interventional patient including pre-procedure and post-procedure care	X	X		X	X	
6.	Fellows should						



	be comfortable in an electrophysiology rotation including appropriate use of studies		X	X			X
7.	Continued fostering of life-long learning skills			X		X	
8.	The fellow will complete all medical records in an accurate and timely manner			X		X	

**LEVEL III**

The third year level is a building year and includes marked exposure to non-invasive studies. The third year is somewhat unique in that the Fellow can direct it, for instances, to complete Level III echocardiography skills or focus on pacemaker or AICD implantation. They can also focus on interventional procedures. There is additional research time which will hopefully allow completion of their research project.

	GOALS	Patient Care	Medical Knowledge	Practice-Based Learning & Improvement	Interpersonal & Communication Skills	Professionalism	Systems-Based Practice
1.	Continue to provide exposure to the noninvasive realm including interpretation of complex studies	X	X				
2.	Increased interventional exposure	X	X				
3.	Significant time dedicated to research to complete project			X			
4.	The fellow may complete Level III echocardiography training if they wish, pursue nuclear certification, or hone in on interventional skills.	X	X	X			X

**Level III**

	<b>OBJECTIVES</b>	<b>Patient Care</b>	<b>Medical Knowledge</b>	<b>Practice-Based Learning &amp; Improvement</b>	<b>Interpersonal &amp; Communication Skills</b>	<b>Professionalism</b>	<b>Systems-Based Practice</b>
1.	Completion of research projection with submission. Minimum abstract presentation required			X			
2.	Continue to focus on life-long learning strategies					X	X
3.	All required numbers of procedures will be completed in this year including 3,500 EKG interpretations	X	X				
4.	At the end of the third year, the Fellow will be capable as an independent consultant in Cardiovascular Medicine	X	X	X	X	X	X
5.	Competency in all key procedures as identified by the Program	X	X				X
6.	The Fellow will complete all medical records in an accurate and timely manner					X	X