



**Zucker School of Medicine at Hofstra/Northwell at Vassar Brothers Medical Center Cardiovascular Disease Fellowship Program**  
**Block Schedule**

PGY4	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8	Block 9	Block 10	Block 11	Block 12	Block 13
Rotation Name:	Consults	CCU	Inpatient Cardiology	Consults	CCU	Inpatient Cardiology	Consults/CCU / Inpatient Cardiology	Cardiac Imaging - MRI/CT/ Nuclear	Echo/ Doppler	Echo/ Doppler	Cath	Cath	Heart Failure
Site:	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1
Percent Outpatient	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Percent Research:													

PGY5	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8	Block 9	Block 10	Block 11	Block 12	Block 13
Rotation Name:	Consults	CCU	Inpatient Cardiology	Cardiac Telemetry	Heart Failure	EP	Cardiac Imaging - MRI/CT/ Nuclear	Cardiac Imaging - MRI/CT/ Nuclear	Echo/ Doppler	Echo/ Doppler	Cath	Elective	Elective
Site:	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1		
Percent Outpatient	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Percent Research:													

PGY6	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8	Block 9	Block 10	Block 11	Block 12	Block 13
Rotation Name:	Echo/ Doppler	Echo/ Doppler	Echo/ Doppler	Cath	CV Surgery	Heart Failure	Cardiac Telemetry	EP	Cardiac Imaging - MRI/CT/ Nuclear	Cardiac Imaging - MRI/CT/ Nuclear	Research	Elective	Elective
Site:	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1			
Percent Outpatient	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Percent Research:													

Sites:	Site 1 = Vassar Brothers Medical Center (VBMC)
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**DEFINITIONS:**

EP	Electrophysiology
Cath	Cardiac Catherization
CCU	Cardiac Critical Care Unit
CV Surgery	Cardiovascular Surgery
Vacation	All fellows are given 4 weeks of vacation per year.
Elective	Fellows can use elective time to gain additional training towards level II or III certification in areas of interest (echo, nuclear, CT/MRI, cath, EP, etc) or tailor their training for any specialized curriculum in discussion with the Program Director.

	Week 1	Week 2	Week 3	Week 4
F1 - 1	Consults	Consults	Consults	Consults
F1 - 2				
F1 - 3				
F1 - 4				
F2 - 1				
F2 - 2				
F2 - 3				
F2 - 4				
F3 - 1				
F3 - 2				
F3 - 3				
F3 - 4				
Consults	1	1	1	1
Inpatient Cardiology	0	0	0	0
CCU	0	0	0	0

Week 5

Week 6

Week 7

Week 8

Week 9

Consults

Consults

Consults

Consults

Consults

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Week 10

Week 11

Week 12

Week 13

Week 14

Consults	Consults	Consults		
			Consults	Consults

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Week 15

Week 16

Week 17

Week 18

Week 19

Week 20

Consults	Consults	Consults	Consults
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Consults	Consults
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1	1	1	1	1	1
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0	0	0	0	0	0
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0	0	0	0	0	0
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Week 21      Week 22      Week 23      Week 24      Week 25      Week 26

Consults	Consults	Consults	Consults
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1	1	1	1	0	0
0	0	0	0	0	0
0	0	0	0	0	0

Week 27

Week 28

Week 29

Week 30

Week 31

Week 32



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Week 33

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Week 39Week 40Week 41Week 42Week 43Week 44



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Week 45Week 46Week 47Week 48Week 49Week 50



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Week 51	Week 52	Consults	Inpatient Cardiology	CCU
		8	0	0
		8	0	0
		4	0	0
		4	0	0
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			0	0
		0	0	0
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		0	0	0

**Zucker School of Medicine at Hofstra/Northwell at Vassar Brothers Medical Center Cardiovascular Disease Fellowship Program**  
**Sample Block Schedule**

PGY4	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8	Block 9	Block 10	Block 11	Block 12
Rotation Name:	Echo/ Doppler	Echo/ Doppler	Cath	Cath	Consults	CCU	Inpatient Cardiology	Cardiac Telemetry	EP	Cardiac Imaging - MRI/CT/ Nuclear	Cardiac Imaging - MRI/CT/ Nuclear	Heart Failure
Site:	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1
Percent Outpatient	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Percent Research:												

PGY5	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8	Block 9	Block 10	Block 11	Block 12
Rotation Name:	Echo/ Doppler	Echo/ Doppler	Cath	Cath	Consults	CCU	Inpatient Cardiology	Consults/CCU/ Inpatient Cardiology	Cardiac Telemetry	EP	Cardiac Imaging - MRI/CT/ Nuclear	Elective
Site:	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1
Percent Outpatient	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Percent Research:												

PGY6	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8	Block 9	Block 10	Block 11	Block 12
Rotation Name:	Echo/ Doppler	Echo/ Doppler	Echo/ Doppler	Cardiac Imaging - MRI/CT/ Nuclear	Cardiac Imaging - MRI/CT/ Nuclear	Consults	CCU	Inpatient Cardiology	CV Surgery	Heart Failure	Research	Elective
Site:	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1	Site 1
Percent Outpatient	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Percent Research:												

Sites:	Site 1 = Vassar Brothers Medical Center (VBMC)
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**DEFINITIONS:**

Vacation	All fellows are given 4 weeks of vacation per year. Vacation cannot be taken during consutls/CCU, Inpatient Cardiology, Cath, & Teaching Service
Elective	Elective options include:

Curriculum  
Organization and  
Fellow Experiences

- Rotations must be of sufficient length to provide relationships with faculty members to allow for mentorship and feedback.
- Rotations must be structured to allow fellows to be an effective interprofessional team that works toward the goals of patient safety and quality improvement.
- Schedules must be structured to minimize conflicts with outpatient responsibilities.
- A minimum time must be spent in the following:
  - **24 months (minimum)** - clinical experience and special experiences;
  - **3 months** - cardiac catheterization laboratory
  - **6 months** - non-invasive cardiac evaluation, including the following:
    - **3 months (minimum)** – Echocardiography
    - **3 months** – Cardiac imaging (tomography, nuclear cardiology, CT imaging, and MRI)
  - **2 months** – Electrophysiology
  - **9 months** - non-laboratory clinical practice
  - **Clinical Experience** (and formal instruction) in:
    - mechanical hemodynamic and catheterization devices
    - interventional electrophysiology
    - interventional procedures
- Assessment of procedural competence should be a continuous process and not be based solely on a minimum number of procedures performed.
- The program must provide educational opportunities for fellows to interact with and learn from other health care professionals, including physicians in other specialties, advanced practice nurses, physician assistants, physical therapists, case managers, laboratory technicians, dietitians, to achieve effective, interdisciplinary team-based care.
- Assessment of procedural competence should be a continuous process and not be based solely on a minimum number of procedures performed.

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include a formal evaluation

n number of procedures

	<b>Level 1 – goal of training</b>		<b>Level II - goal of</b>
	<b>Minimum requirements*</b>	<b>Selected skills</b>	<b>Minimum requirements*</b>
Ambulatory, Consultative, Longitudinal Care	<i>competent consultant cardiologist</i>		<i>non-invasive cardiac procedural skills</i>
	Continuity clinic ≥40 weeks / year	Manage chronic cardiac conditions	
Preventive Cardiovascular Medicine	<i>Competent consultant cardiologist</i>		---
	1 month prevention 6-12 months general clinical cardiology		
Electrocardiography, Ambulatory Electrocardiography, and Exercise Testing			---
	≥3000 ECGs	High-quality 12-lead ECG interpretation Interpret ambulatory ECG monitoring Interpret exercise stress test	
Multimodality Imaging	<i>recognize appropriate use of cardiac imaging modalities</i>		---
		Expertise in at least two imaging modalities	
Echocardiography	<i>basic competency in performing and viewing TTE</i>		<i>independent interpretation</i>
	3 months Interpret 150 Perform 75	Integrate basic TTE images in clinical practice	6 months interpret 300 perform 150  NBE Exam
Nuclear Cardiology	<i>conversant with the field of nuclear cardiology</i>		<i>practice clinical nuclear medicine and interpretation</i>
	2 months 100 studies	Integrate nuclear studies in patient care	4 months 300 studies 700 hours perform 30 studies CBNC exam
Cardiovascular CT	<i>understand principles, indications, and technical limitations of CCT</i>		<i>perform and interpret CCT</i>
	15 at scanner Interpret 50	Integrate CCT in patient care	80 at scanner Interpret 250 CBCCT exam
Cardiovascular MRI			<i>perform and interpret MRI</i>
	1 month 25 cases	Interpret LGE Integrate CMR in patient care	3 months Interpret 150 Acquire 50 CBCMR exam

Vascular Medicine	<i>integrating knowledge of vascular disease in care of patients</i>		<i>interpret noninvasive peripheral vascular</i>
		Perform and interpret ABI	500 studies  PVI examination
Cardiac Catheterization			<i>perform diagnostic</i>
	4 months <u>100 diagnostic</u> 50 angiography 25 hemodynamics	Pre-procedural evaluation Venous and arterial access Hemostasis Right heart catheterization Post-procedure care	6 months 300 diagnostic 100 peripheral
Arrhythmia Diagnosis and Management, Cardiac Pacing, and Electrophysiology	<i>arrhythmia management in standard clinical practice</i>		<i>advanced non-invasive pacemaker placement</i>
	2 months 5 temporary pacemakers 20 cardioversions	Cardioversion Defibrillation Temporary pacemaker Medically manage atrial and ventricular arrhythmias Refer for device therapy and catheter ablation	6 months 100 CIED interrogations 25 remote interrogations 40 pacemaker implantations
Heart Failure	<i>diagnosis and management of heart failure</i>		<i>advanced clinical</i>
	2 months		Focused general cardiology training pathway
Critical Care Cardiology	<i>manage patients in a critical care cardiology environment</i>		---
	8 weeks	PA catheter placement Hypothermia protocol Shock management	
Care of Adult Patients with Congenital Heart Disease	<i>understand guidelines, manage patients with repaired ACHD</i>		---
	Didactics	Provide activity level recommendations in simple ACHD Recognize Eisenmenger physiology	
Cardiovascular Research and Scholarly Activity	<i>critically interpret literature as it applies to clinical cardiovascular care.</i>		---



and secondary review

secondary review

6-12 months

Literature review  
Ethical conduct

<b>training</b>		<b>Level III – goal of training</b>	
	<b>Selected advanced skills:</b>	<b>Minimum requirements*</b>	<b>Selected advanced skills</b>
<i>diologist with selected advanced</i>		---	
	Diagnostic cardiac catheterization Pericardiocentesis		
		No level III – additional non-ACGME accredited training is common for directors of a clinical service or research progr	
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		<i>direct an imaging center, train others, advanced cardiovascular imaging research</i>	
		Additional training	***
<i>erpretation of echocardiography studies</i>		<i>complex studies, echo research, direct academic echocardiography lab, train others.</i>	
	TEE Stress echocardiography 3D echocardiography Complex valve disease Pericardial disease/constriction Quantitative hemodynamics Cardiac masses / endocarditis Contrast echocardiography	9 months Interpret 450 Perform 300	Intra-operative TEE Interpret ACHD studies
<i>nuclear cardiology - providing supervision on of studies</i>		<i>academic career, direct clinical nuclear lab</i>	
ies	Radiation safety Image acquisition and reconstruction MPI (SPECT, PET) Radionuclide angiography	Additional training	SPECT/CT; PET/CT Cardiac innervation, first pass, and studies
<i>erpret CCT independently.</i>		<i>direct a CC laboratory, train others in CCT, and conduct advanced imaging research.</i>	
	Image acquisition and processing Non-cardiac findings	Additional training	CT/SPECT CT/PET
<i>erpret CMR independently</i>		<i>direct a CMR laboratory, train others in CMR</i>	
	CMR physics LV and RV function Aortic disease Myocardial masses Pericardial disease ACHD Stress CMR	Additional training	Peripheral artery MRI

<i>passive diagnostic tests; managing arterial diseases</i>		<i>direct a vascular laboratory, train others, conduct advanced research</i>	
	Perform and interpret non-invasive vascular lab studies: segmental blood pressure measurements pulse volume recordings, doppler waveforms, treadmill vascular exercise test evaluate lymphedema	Additional training	Diagnose arterial compression syndromes Manage chronic venous insufficiency Manage lower extremity wounds Manage lymphedema Manage Raynaud's phenomenon, cold temperature related disorders Manage arteriopathies related to connective tissue disease Recommend appropriate procedures for peripheral and visceral aneurysms
<i>intercath cardiac catheterization</i>		<i>practice interventional cardiology</i>	
	Endomyocardial biopsy Pericardiocentesis Diagnostic left heart catheterization Emergent IABP placement Diagnostic peripheral angiography	Advanced fellowship  ABIM exam	PCI Peripheral, carotid, and structural interventions Insert and manage peripheral LV support devices
<i>invasive arrhythmia management, including ablation</i>		<i>practice clinical electrophysiology</i>	
	Tilt-table testing Placement and surveillance of pacemakers and loop recorders. ICD programming	Advanced fellowship  ABIM exam	ICD and biventricular device placement Invasive EP testing Ablation therapy Intracardiac echocardiography
<i>critical care of heart failure</i>		<i>comprehensive management of patients with severe and refractory forms of heart failure</i>	
Managing	Interpret and implement CPET results Longitudinal management of severe heart failure, including home inotrope support Screen for eligibility for advanced therapies	Advanced fellowship  ABIM exam	Manage patients on MCS Interpret imaging in uncommon forms of heart failure Full evaluation for candidacy and selection of advanced therapies Manage patients undergoing cardiac transplantation†
		<i>specialize in critical care cardiology in a leadership and/or research position</i>	
		Critical care fellowship	Emergent IABP placement Endotracheal intubation
		<i>clinically manage complex ACHD, teach others, conduct advanced research, direct an ACHD program,</i>	
		Advanced fellowship  ABIM exam	Interpret echocardiograms in ACHD Interpret hemodynamic and angiographic data in ACHD Appropriately recommend operative management of ACHD and sequelae Medical management of all forms of ACHD
		<i>career in scientific investigation</i>	

Advanced degree encouraged	
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