Rotation: Echocardiography: Transesophageal Echocardiography (TEE)

Rotation Format and Responsibilities:
Fellows rotate in the TEE laboratory in the second and third years of fellowship. During this rotation, fellows perform and interpret TEEs under the direct supervision of an attending. Fellows learn cardiovascular anatomy, physiology, and pathophysiology as it pertains to the TEE examination.

Learning Objectives

Medical Knowledge	
Objective	**Teaching Methods**
1. Know the appropriate indications, including Appropriate Use Criteria, for TEE as well as specific modalities such as 2D, 3D, Doppler, Color Flow and Contrast echocardiography	- Clinical teaching - Didactics - Performance Feedback
2. Identify normal cardiac anatomy obtained from multiple imaging planes and with 2D and 3D imaging	- Clinical teaching - Didactics - Performance Feedback
3. Know the techniques to correctly characterize the following: a. chamber size, wall motion and ventricular function b. native and prosthetic valve structure and function c. suspected cardiac source of embolism d. cardiac masses and suspected infective endocarditis e. intracardiac devices, pacemakers and ICDs	- Clinical Teaching - Didactics - Performance Feedback
4. Understand the applications of TEE to guide interventional procedures (TAVR, ASD closure, trans- septal puncture, Mitraclip, etc) and cardiac surgery	- Clinical Teaching - Didactics - Performance Feedback

Patient Care	
Objective	**Teaching Methods**
1. Understand proper cleaning and maintenance of probe	- Clinical Teaching - Hands on experiences - Performance Feedback
2. Obtain pertinent medical history and physical examination as it relates to the performance and interpretation of TEE	- Clinical teaching - Performance Feedback
3. Understands the risks associated with TEE and able to review these with the patient when obtaining informed consent	- Clinical teaching - Performance Feedback
4. Reviews entire procedure with patient and addresses all questions and concerns prior to initiation of anesthesia	- Clinical Teaching - Hands on experiences

	- Performance Feedback
5. Skill to intubate the esophagus with ease	- Clinical teaching - Performance Feedback
6. Skill to perform complete study using two-dimensional, basic 3-dimensional and Doppler techniques	- Clinical teaching - Performance Feedback
7. Recognize and assist with the management of all complications associated with the procedure	- Clinical teaching - Performance Feedback
8. Reviews results of TEE with patient and addresses all questions	- Clinical teaching - Performance Feedback

Practice Based Learning and Improvement	
Objective	**Teaching Methods**
1. Appropriately Identify areas of weakness in own skills and works to make improvements	- Independent reading - Clinical teaching - Didactics - Attending evaluation and feedback
2. Respond appropriately to feedback	- Performance evaluation

Interpersonal and Communication Skills	
Objective	**Teaching Methods**
1. Provide timely and appropriate communication to ordering providers, including advice/consultation to ensure the appropriate imaging procedure is performed	- Clinical Teaching - Clinical Experiences - Role Models
2. Provide accurate and timely documentation	- Clinical Experience - Role Models - Performance Feedback
3. Communicate effectively with patients and families	- Role Models - Performance Feedback
4. Accurately and effectively obtain informed consent	- Clinical Teaching - Role Models - Performance Feedback

Professionalism	
Objective	**Teaching Methods**

1. Maintain patient privacy and comfort throughout the procedure	- Clinical Teaching - Role Models
2. Demonstrate appropriate sensitivity to patient and family needs	- Clinical Teaching - Role Models
3. Remain accessible to colleagues and laboratory personnel	- Performance Feedback
4. Accept personal responsibility for actions	- Role Models - Performance Feedback

Systems Based Practice	
Objective	**Teaching Methods**
1. Work effectively as a member of the echocardiography laboratory and the health care team	- Clinical teaching - Role models - Evaluation and feedback
2. Identify areas within the echocardiography laboratory that need improvement	- Clinical teaching - Role Models - Evaluation and feedback