EPA 3 Teaching Tips: Performing biopsies using imaging guidance and determining appropriate post-procedural management

• EPA3a: Stereotactic biopsy

• EPA3b: Ultrasound

• EPA3c: MRI *elective EPA

When teaching trainees how to perform a procedure, it is important to talk them through the procedure and your thinking. Having them review relevant resources prior to the rotation is also beneficial to provide a foundation and context for their learning.

- Have trainees review case for biopsy and tell you: why biopsy is indicated, approach, optimal patient positioning, type of marking clip (if indicated), how to tell if tissue sample is adequate, what to look for on post-procedure imaging
- Use a staged model for informed consent:
 - a. Resident/fellow observes you obtaining informed consent
 - b. Role play with trainee prior to first informed consent: "Pretend I am the patient and you are obtaining informed consent. What would you say?" This is a great way for trainees to practice before speaking with the patient, while also providing an opportunity for feedback and guidance
 - c. You observe resident/fellow obtaining informed consent
 - d. Resident/fellow obtains informed consent prior to you entering room
- Use a stage model for procedure performance
 - e. Have trainee watch you perform a procedure (Discuss how and why you hold the device a certain way and why the patient is positioned in such a way; point out optimal placement of biopsy device), and if misplaced, next steps
 - f. Have trainee obtain informed consent, skin cleaning, localization numbing; then hand off to attending trainee can obtain last biopsy sample; attending places marking clip
 - g. Have trainee obtain informed consent, skin cleaning, localization numbing, tissue sampling, clip placement

It is essential that trainees are comfortable with the tray set up, equipment, how to use biopsy device before performing any part of the procedure

- Have trainee determine is specimen is adequate prior to clip placement
- After biopsy, have trainee discuss expectations of benign/high risk/malignant pathology and appropriate management
- Review cases with finalized biopsy results and discuss concordancy and management.
- Used a staged model for patient communication of results:
- 2. Trainee observes you communicating with patient regarding imaging findings (benign, probably benign, indeterminate, highly suspicious)
- 3. You observe trainee giving benign results and give feedback
- 4. You observe trainee giving probably benign results and give feedback
- 5. You observe trainee giving indeterminate results and give feedback*
- 6. You observe trainee giving highly suspicious results and give feedback*

*this stage is usually mini-fellow and fellow level preferably on patients a trainee has developed a rapport with by performing the biopsy

• Have trainee call clinician and/or patient with high risk and malignant biopsy results and management

Once you have been able to observe the trainee perform at least 5 procedures (from start to finish) of each modality and completed 5-10 informal case based discussions with you, you are ready to evaluate the trainee on this EPA.