# **OSUMC Breast Imaging Rotation**

#### **1ST YEAR**

This rotation involves interpretation of mammograms, performance and interpretation of breast sonography and breast MRI, performance of guided breast biopsies, and breast cancer localizations.

#### **PATIENT CARE**

#### Goal

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

# **Knowledge Objectives:**

- State guidelines for screening mammography,
- Describe the work-up of breast cancer, and
- Accurately perform the complete workup of an abnormal screening finding through diagnostic workup to include interventional procedures and patient referral for final care based on the biopsy findings.

# **Skill Objectives:**

- Interpret and report screening mammograms (either analog, film/screen or digital) with help of computer assisted detection software,
- Perform breast ultrasound examinations with assistance, and
- Assist with localizations, ultrasound and stereotactic-guided biopsies, and cyst aspirations.

### **Behavior and Attitude Objectives:**

- Work with the health care team in a professional manner to provide patient centered care, and
- Notify referring clinician for urgent, emergent, or unexpected findings, and document in dictation.

# MEDICAL KNOWLEDGE

# Goal

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care. Residents are expected to:

### **Knowledge Objectives:**

- Describe pathophysiology of breast cancer,
- Identify relevant anatomic structures on various breast imaging modalities, and
- Diagnose more straightforward breast cancer cases.

### **Skill Objectives:**

- Accurately interpret screening and more straight-forward diagnostic mammograms (either analog, film/screen or digital), and
- Accurately interpret breast ultrasounds.
- Behavior and Attitude Objectives:
- Recognize limitations of personal competency and ask for guidance when appropriate.

#### PRACTICE-BASED LEARNING AND IMPROVEMENT

#### Goal

Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning. Residents are expected to develop skills and habits to be able to:

### **Knowledge Objectives:**

• Assess mammography images (either analog, film/screen or digital) for quality and suggest methods of improvement.

# **Skill Objectives:**

- Demonstrate independent self-study using various resources including texts, journals, teaching files, and other resources on the internet, and
- Facilitate the learning of students and other health care professionals.

# **Behavior and Attitude Objectives:**

- Incorporate formative feedback into daily practice, positively responding to constructive criticism, and
- Follow-up interesting or difficult cases without prompting and share this information with appropriate faculty and fellow residents.

# SYSTEM BASED PRACTICE

# Goal

Residents must demonstrate an awareness of, and responsiveness to, the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents are expected to:

### **Knowledge Objectives:**

• Understand how their image interpretation affects patient care.

# **Skill Objectives:**

- Provide accurate and timely interpretations to decrease patient wait times,
- Appropriately notify the referring clinician if there are urgent or unexpected findings and document such without being prompted; and
- Practice using cost effective use of time and support personnel.

# **Behavior and Attitude Objectives:**

• Advocate for quality patient care in a professional manner, particularly concerning imaging utilization issues

### **PROFESSIONALISM**

• Goal

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:

# **Knowledge Objectives:**

- Understanding of the need for respect for patient privacy and autonomy, and
- Understanding of their responsibility for the patient and the service, including arriving in the reading room promptly each day, promptly returning to the reading room after conferences, completing the work in a timely fashion, and not leaving at the end of the day until all work is complete. If the resident will be away from a service (for time off, meeting, board review, etc.), this must be arranged in advance with the appropriate faculty.

# **Skill Objectives:**

• Sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.

## **Behavior and Attitude Objectives:**

 Respect, compassion, integrity, and responsiveness to patient care needs that supersede self-interest.

#### INTERPERSONAL AND COMMUNICATION SKILLS

# Goal

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates. Residents are expected to:

# **Knowledge Objectives:**

• Know the importance of accurate, timely, and professional communication.

### **Skill Objectives:**

- Produce concise and accurate reports on most examinations, and
- Communicate effectively with physicians, other health professionals.

# **Behavior and Attitude Objectives:**

# **2ND YEAR**

This rotation involves interpretation of mammograms, performance and interpretation of breast sonography and breast MRI, performance of guided breast biopsies, and breast cancer localizations.

### **PATIENT CARE**

#### Goal

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

# **Knowledge Objectives:**

- Describe the work-up of more complex breast cancer patients, and
- Accurately perform the complete workup of an abnormal screening finding through diagnostic workup to include interventional procedures and patient referral for final care based on the biopsy findings.

# **Skill Objectives:**

- Interpret and report screening mammograms (either analog, film/screen or digital) with help of computer assisted detection software (CAD),
- Perform breast ultrasound examinations without assistance, but with the supervision of faculty and
- Perform localizations, ultrasound and stereotactic-guided biopsies, and cyst aspirations with minimal assistance.

# **Behavior and Attitude Objectives:**

- Work with the health care team in a professional manner to provide patient-centered care, and
- Notify referring clinician for urgent, emergent, or unexpected findings, and document in dictation.

#### MEDICAL KNOWLEDGE

#### Goal

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care. Residents are expected to:

## **Knowledge Objectives:**

• Diagnose more complex breast cancer cases.

### **Skill Objectives:**

- Accurately interpret screening and more complex diagnostic mammograms (either analog, film/screen or digital), and
- Accurately interpret breast ultrasounds.

# **Behavior and Attitude Objectives:**

• Recognize limitations of personal competency and ask for guidance when appropriate.

### PRACTICE-BASED LEARNING AND IMPROVEMENT

#### Goal

Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning. Residents are expected to develop skills and habits to be able to:

### **Knowledge Objectives:**

• Assess mammography images (either analog, film/screen or digital) for quality and suggest methods of improvement.

# **Skill Objectives:**

- Demonstrate independent self-study using various resources including texts, journals, teaching files, and other resources on the internet, and
- Facilitate the learning of students and other health care professionals.

### **Behavior and Attitude Objectives:**

- Incorporate formative feedback into daily practice, positively responding to constructive criticism, and
- Follow-up interesting or difficult cases without prompting and share this information with appropriate faculty and fellow residents

### SYSTEMS BASED PRACTICE

### Goal

Residents must demonstrate an awareness of, and responsiveness to, the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents are expected to:

### **Knowledge Objectives:**

• Understand how their image interpretation affects patient care.

## **Skill Objectives:**

- Provide accurate and timely interpretations to decrease patient wait times,
- Appropriately notify the referring clinician if there are urgent or unexpected findings and document such without being prompted; and
- Practice using cost effective use of time and support personnel.

# **Behavior and Attitude Objectives:**

 Advocate for quality patient care in a professional manner, particularly concerning imaging utilization issues.

#### **PROFESSIONALISM**

#### Goal

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:

# **Knowledge Objectives:**

- Understanding of the need for respect for patient privacy and autonomy, and
- Understanding of their responsibility for the patient and the service, including arriving in the reading room promptly each day, promptly returning to the reading room after conferences, completing the work in a timely fashion, and not leaving at the end of the day until all work is complete. If the resident will be away from a service (for time off, meeting, board review, etc.), this must be arranged in advance with the appropriate faculty.

# **Skill Objectives:**

- Sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation, and
- Respect, compassion, integrity, and responsiveness to patient care needs that supersede self-interest.

# **Behavior and Attitude Objectives:**

• Respect, compassion, integrity, and responsiveness to patient care needs that supersede self-interest.

# **Interpersonal and Communication Skills**

### Goal

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates. Residents are expected to:

#### **Knowledge Objectives:**

• Know the importance of accurate, timely, and professional communication.

# **Skill Objectives:**

- Produce concise and accurate reports on most examinations, and
- Communicate effectively with physicians, other health professionals.

### **Behavior and Attitude Objectives:**

# **3RD YEAR**

This rotation involves interpretation of mammograms, performance and interpretation of breast sonography and breast MRI, performance of guided breast biopsies, and breast cancer localizations.

### **PATIENT CARE**

#### Goal

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

### **Knowledge Objectives:**

• Describe basic sequences used in breast MR

# **Skill Objectives:**

- Interpret and report screening mammograms (either analog, film/screen or digital) with help of computer assisted detection software,
- Perform breast ultrasound examinations without assistance, but with the supervision of faculty and
- Perform localizations, ultrasound and stereotactic-guided biopsies, and cyst aspirations with minimal assistance.
- Perform ductograms successfully, both via nipple and percutaneously
- Successfully localize tumors with appropriate in vivo marker clips

# **Behavior and Attitude Objectives:**

- Work with the health care team in a professional manner to provide patient-centered care, and
- Notify referring clinician for urgent, emergent, or unexpected findings, and document in dictation.

# MEDICAL KNOWLEDGE

### Goal

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care. Residents are expected to:

### **Knowledge Objectives:**

- Identify relevant anatomic structures on breast MR examinations,
- Diagnose more complex breast cancer cases, and
- Describe MR findings of benign and malignant breast disease.

### **Skill Objectives:**

• Accurately interpret most breast MR examinations.

- Behavor and Attitude Objectives:
- Recognize limitations of personal competency and ask for guidance when appropriate, an
- Practice according to MQSA regulations.

## PRACTICE-BASED LEARNING AND IMPROVEMENT

#### Goal

Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning. Residents are expected to develop skills and habits to be able to:

### **Knowledge Objectives:**

• Assess mammography images (either analog, film/screen or digital) for quality and suggest methods of improvement.

# **Skill Objectives:**

- Demonstrate independent self-study using various resources including texts, journals, teaching files, and other resources on the internet, and
- Facilitate the learning of students and other health care professionals.

## **Behavior and Attitude Objectives:**

- Incorporate formative feedback into daily practice, positively responding to constructive criticism, and
- Follow-up interesting or difficult cases without prompting and share this information with appropriate faculty and fellow residents.

#### SYSTEMS BASED PRACTICE

#### Goal

Residents must demonstrate an awareness of, and responsiveness to, the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents are expected to:

# **Knowledge Objectives:**

Understand how their image interpretation affects patient care.

### **Skill Objectives:**

- Provide accurate and timely interpretations to decrease patient wait times,
- Appropriately notify the referring clinician if there are urgent or unexpected findings and document such without being prompted; and
- Practice using cost effective use of time and support personnel.

### **Behavior and Attitude Objectives:**

• Advocate for quality patient care in a professional manner, particularly concerning imaging utilization issues.

#### **PROFESSIONALISM**

#### Goal

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:

# **Knowledge Objectives:**

- Understanding of the need for respect for patient privacy and autonomy, and
- Understanding of their responsibility for the patient and the service, including arriving in the reading room promptly each day, promptly returning to the reading room after conferences, completing the work in a timely fashion, and not leaving at the end of the day until all work is complete. If the resident will be away from a service (for time off, meeting, board review, etc.), this must be arranged in advance with the appropriate faculty.

# **Skill Objectives:**

• Sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.

# **Behavior and Attitude Objectives:**

 Respect, compassion, integrity, and responsiveness to patient care needs that supersede self-interest.

#### INTERPERSONAL AND COMMUNICATION SKILLS

# Goal

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates. Residents are expected to:

# **Knowledge Objectives:**

• Know the importance of accurate, timely, and professional communication.

### **Skill Objectives:**

- Produce concise and accurate reports on most examinations, and
- Communicate effectively with physicians, other health professionals.

# **Behavior and Attitude Objectives:**

### 4TH YEAR

This rotation involves interpretation of mammograms, performance and interpretation of breast sonography and breast MRI, performance of guided breast biopsies, and breast cancer localizations.

### **PATIENT CARE**

#### Goal

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

# **Knowledge Objectives:**

- Describe basic sequences used in breast MR
- Understand the benefits and pitfalls of CAD.

### **Skill Objectives:**

- Interpret and report screening mammograms (either analog, film/screen or digital) with help of CAD
- Perform breast ultrasound examinations without assistance, and
- Perform localizations, ultrasound and stereotactic-guided biopsies, and cyst aspirations with minimal assistance.

# **Behavior and Attitude Objectives:**

- Work with the health care team in a professional manner to provide patient-centered care, and
- Notify referring clinician for urgent, emergent, or unexpected findings, and document in dictation.

# MEDICAL KNOWLEDGE

### Goal

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care. Residents are expected to:

### **Knowledge Objectives:**

- Identify relevant anatomic structures on breast MR examinations,
- Diagnose more complex breast cancer cases, and
- Describe MR findings of benign and malignant breast disease.

### **Skill Objectives:**

• Accurately interpret most breast MR examinations.

# **Behavior and Attitude Objectives:**

- Recognize limitations of personal competency and ask for guidance when appropriate, and
- Practice according to MQSA regulations.

### PRACTICE-BASED LEARNING AND IMPROVEMENT

#### Goal

Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning. Residents are expected to develop skills and habits to be able to:

### **Knowledge Objectives:**

• Assess mammography images (either analog, film/screen or digital) for quality and suggest methods of improvement.

# **Skill Objectives:**

- Demonstrate independent self-study using various resources including texts, journals, teaching files, and other resources on the internet, and
- Facilitate the learning of students and other health care professionals.

### **Behavior and Attitude Objectives:**

- Incorporate formative feedback into daily practice, positively responding to constructive criticism, and
- Follow-up interesting or difficult cases without prompting and share this information with appropriate faculty and fellow residents.

### SYSTEMS BASED PRACTICE

### Goal

Residents must demonstrate an awareness of, and responsiveness to, the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents are expected to:

### **Knowledge Objectives:**

• Understand how their image interpretation affects patient care.

## **Skill Objectives:**

- Provide accurate and timely interpretations to decrease patient wait times,
- Appropriately notify the referring clinician if there are urgent or unexpected findings and document such without being prompted; and
- Practice using cost effective use of time and support personnel.

### **Behavior and Attitude Objectives:**

• Advocate for quality patient care in a professional manner, particularly concerning imaging utilization issues.

#### **PROFESSIONALISM**

#### Goal

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:

# **Knowledge Objectives:**

- Understanding of the need for respect for patient privacy and autonomy, and
- Understanding of their responsibility for the patient and the service, including arriving in the reading room promptly each day, promptly returning to the reading room after conferences, completing the work in a timely fashion, and not leaving at the end of the day until all work is complete. If the resident will be away from a service (for time off, meeting, board review, etc.), this must be arranged in advance with the appropriate faculty.

# **Skill Objectives:**

• Sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.

# **Behavior and Attitude Objectives:**

 Respect, compassion, integrity, and responsiveness to patient care needs that supersede self-interest.

### INTERPERSONAL AND COMMUNICATION SKILLS

#### Goal

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates. Residents are expected to:

## **Knowledge Objectives:**

• Know the importance of accurate, timely, and professional communication

# **Skill Objectives:**

- Produce concise and accurate reports on most examinations, and
- Communicate effectively with physicians, other health professionals.

### **Behavior and Attitude Objectives:**