

Maternal-Fetal Medicine Fellowship Program



University of Tennessee Health Science Center
Department of Obstetrics and Gynecology
Giancarlo Mari, MD, MBA – Chair

MFM Program - Duration

The Maternal Fetal Medicine Fellowship Program is a 36 month program (ACGME accredited).

15 months of research

21 months of clinical activities

Fellow will present their thesis as an abstract in 2nd year

Fellow will complete and defend thesis at end of 3rd year

MFM Program – Goal

The overall goal of the Maternal-Fetal Medicine Fellowship Program is to develop clinician-scientists who are prepared to conduct research, teach, and provide high quality sub-specialty care.

The program is based within the University of Tennessee Health Science Center, College of Medicine – Department of Obstetrics and Gynecology, serving Regional One Health (ROH) at Memphis, and it involves other academic departments and divisions (e.g., Neonatology, Pathology, Anesthesiology, Genetics, and Surgery), as well as affiliated practice sites (e.g., ROH facilities, Le Bonheur Fetal Center, Baptist and Methodist Hospitals).

Role of the MFM Fellow

- MFM Fellow will act as an advisor to the resident in the antepartum period
 - The resident provide primary and direct patient care, while fellow's role is to advise prior to presenting plans to the MFM attending on duty, who will make the final management decisions.
- MFM Fellow will participate in antepartum testing
- MFM Fellow will serve as an additional and approachable consultant resource to the resident
- MFM Fellow will work with the resident during clinics to discuss patient management

Role of the MFM Fellow cont'd

- Resident will present cases to the Fellow
- MFM Fellow will attend and provide lectures at the residency didactics sessions.
- MFM Fellow is expected to serve as a role model for the resident
- MFM Fellows and residents will serve in complementary, rather than competitive roles

Educational Plan

At the beginning of the program, each fellow receives an individual educational plan that includes didactics, research, and a monthly block diagram displaying the clinical and research activities by rotation.

Educational Plan – Didactics

- Didactics – Conducted by core faculty members (occur weekly)
- Morbidity and Mortality Conference (M&M) – Conducted by core faculty members and other department faculty for some sessions (occur every other month)
- MFM/NEO Conference – Presented monthly by fellow.
- Congenital Anomalies Conference (CAC) – held by MFM faculty at Le Bonheur - Discussion of cases seen (every Wednesday)
 - Fellows present 4-5 cases per week

Educational Plan – Didactics cont'd

- TeamSTEPPS (Strategies and Tools to Enhance Performance and Patient Safety) Program (Meetings occur every 12 hours in L&D)
 - MFM fellows, when on duty, are the leaders of the team, with the faculty attending as backup.
- Grand Rounds – Conducted by visiting professors (once monthly)
- MFM Fellowship Journal Clubs – All core faculty conduct these sessions (6 times per year)

Educational Plan – Didactics cont'd

- OBFAS (OB - Feasible Approach to Simulation Training) Fellows participate in our simulation program
- Seminars – Conducted by MFM and Neonatology faculty members and nursing from Labor & Delivery (1 time per year)
- Thursday Fellow Clinic

(Note: Didactic Sessions must be a minimum of 4 hours averaged over 4 week period)

Educational Plan – Scholarly Activities

MFM Fellowship offers a curriculum inclusive of clinical and research activities.

Curriculum Includes:

- Excellence in Clinical Research course
- Journal Clubs
- Research Projects
- Research presentation of their thesis and other projects
- Opportunity to participate at grant writing seminars organized by the University
- Lectures to residents and medical students
- Fetal Center Conference Presentation
- Lectures devoted to epidemiology and statistics
- Submission of abstracts and manuscripts to national and international conferences and peer reviewed journals.

Research Activities

MFM Fellow will be allocated 15 months of research during the fellowship

- PGY 5 Fellow – 6 months of research
- PGY 6 Fellow – 3 months of research
- PGY 7 Fellow – 6 months of research

The following clinical and laboratory research facilities are available to the fellows to conduct basic and clinical research:

- The High Risk Clinic
- The Antenatal Testing Area
- The Labor and Delivery Unit
- The Ultrasound Unit
- The Fetal Center

There are two fully equipped ultrasound systems (**Voluson E8 and E10**) devoted to research projects in these areas.

Research – Goals and Objectives

The overall Research goals and objectives for the MFM Fellowship Program are:

- Provide opportunities for structured basic laboratory and/or clinical research and the development of additional clinical skills.
- Enhancement of the fellow's understanding of the latest scientific techniques and encouragement of interaction with other scientists.
- Promotion of the fellow's academic contributions to the subspecialty.
- Enhancement of the opportunities for the fellows to obtain research funding and academic positions.
- Furthering of the ability of the fellow to be an independent researcher/investigator.

Additional experiences and learning opportunities supplement the fellow's time in the program. Our program offers fellows a wide range of experiences due to the nature of our patient population, faculty, and services provided.

Research Activities cont'd

- All MFM research staff members are CITI, and HIPAA certified.
- During the first 3 months of the start of the fellowship, the fellow will attend one lecture on IRB, good clinical practices, HIPAA/Ethics. The fellow will complete IRB and HIPAA on-line training (available online at UTHSC). The nurse coordinator can assist with this training.
- Departmental biostatisticians are available to discuss and help fellow with their research projects.
- There is a research meeting every other month.
- Research Opportunities
 - Research Model of Preeclampsia
- Clinical Research in the MFM Division
 - Doppler Ultrasonography
 - Maternal Pathology
 - Infant Mortality
 - HIV and other infectious disease in pregnancy

Research Activities cont'd

- Fellows have access to the laboratory in the Department of Pharmacology to complete bench and transitional research projects.
 - Equipment in this lab includes the following:
 - Flow cytometry
 - Microscopy
 - Centrifugation
 - Micro plate readers for DNA, RNA, and protein quantification,
 - And all necessary equipment to perform PCR, Western blot, and ELISA tests.
- Fellows have access to additional resources for research activities:
 - Grant supported studies carried out in the Obstetrics Infectious Disease Clinic
 - Statistical support provided by:
 - Jim Wan, Ph.D., Associate Professor in Preventive Medicine
 - Mauro Schenone, MD., Director of Maternal Fetal Medicine
 - Alejandro Dopico, MD., Chairman of Pharmacology
 - Anna Bukiya, Ph.D., Associate Professor in Pharmacology
 - Zoran Bursac, Ph.D., Preventive Medicine
 - Trish Goedecke, MS, Preventive Medicine
 - Ramasubbareddy Dhanireddy, MD, Director of Neonatology

Research Activities – Evaluation Tool

**Maternal-Fetal Medicine Fellowship
The University of Tennessee Health Science Center – Memphis**

Fellow Research Rotation Evaluation Form

Name: _____

PGY (5/6/7): _____

Evaluation Date: _____

Indicate frequency of interaction
W = weekly, D = daily, I = infrequent

- Direct observation
- Presentations
- Record or case review
- Other contact

| | | | |
|------------------------------------|----------------------------------|-------------------------------|------------------------------|
| Unsatisfactory performance 1 | Satisfactory performance 2 | Excellent performance 3 | Superior performance 4 |
|------------------------------------|----------------------------------|-------------------------------|------------------------------|

Please rank the MFM fellow using the above scale on each content area and procedural competency area. Please mark “N/A” if you are unable to evaluate.

RESEARCH ACTIVITIES:

- _____ The hypothesis underlying the proposed research is original and has been developed by the fellow in consultation with the mentor.
- _____ The fellow did the majority (>75%) of the background review of the literature.
- _____ The fellow understands the concepts being investigated and is knowledgeable in the field.
- _____ The fellow wrote a clear research protocol using the hypothesis and background information.
- _____ The fellow provided a unique experimental approach to the problem.
- _____ The fellow understands the type of laboratory procedures applied to the investigation (e.g., Western blot, cell culture, microarray, etc.) and has become familiar with them.
- _____ The fellow provided >90% effort in obtaining the results.
- _____ The fellow is able to interpret the results, place them in perspective, and assess their significance.
- _____ The fellow is capable of applying rigorous scientific methodology to test an experimental hypothesis.
- _____ The fellow is capable of writing a scientific paper that meets the criteria for acceptance at a peer-reviewed journal of the specialty.
- _____ Thesis progress.

COMMENTS:

Signature of Evaluator: _____

Date: _____

Research Activities cont'd

<https://www.excellence.org/developing-excellence/excellence-in-clinical-research-course/>

Excellence in Clinical Research Course | The Foundation ...

www.excellence.org

Through research, grants and innovations in education, The Excellence Foundation focuses on advancing Obstetrics and Gynecology for the benefit of the estimated ...

Clinical Rotations – Goals and Objectives

For each clinical rotation, the goal is to train an individual in an environment conducive to supporting fellows to:

- Become a consultant to generalists for women with complicated pregnancies
- Acquire an evidence-based approach to the care of complicated pregnancies
- Become facile in the conduct and evaluation of research
- Have expertise in obstetric ultrasound

Clinical Rotations – Goals and Objectives

The MFM program requires that during each rotation, fellows demonstrate competence in the following six core areas:

- Patient Care
- Medical Knowledge
- Practice-Based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-Based Practice

Clinical Rotations – Competencies

Patient Care: Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health

Medical Knowledge: Fellows 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.

Practice-Based Learning and Improvement: Fellows 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 life-long learning

Interpersonal and Communication Skills: Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

Professionalism: Fellows must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

System-Based Practice: Fellows 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.

MFM Fellow Supervision

The purpose of this document is to outline the supervisory roles of faculty and fellows during clinical training and in patient care.

Appropriate supervision includes not only the main hospital inpatient wards, but also diverse areas such as the clinics and emergency department. The Department of Obstetrics and Gynecology also recognizes that supervision is an issue 24 hours per day, every day. The Department complies with this requirement by having faculty; full-time, part-time and clinical take in-house call on a daily basis. If a problem arises that requires additional faculty or sub-specialty assistance, the appropriate physician is contacted at home and will come to the hospital if necessary.

MFM Fellow Supervision

Supervision of MFM Fellow

The privilege of progressive authority and responsibility, conditional independence, and a supervisory role in patient care delegated to each fellow must be assigned by the program director and faculty members.

The program director must evaluate each fellow's abilities based on specific criteria, guided by the Milestones. Based on the needs of the patient and the skills of the fellows, faculty members functioning as supervising physicians must delegate portions of care to fellows.

Fellows should serve in a supervisory role of residents in recognition of their progress toward independence, based on the needs of each patient and the skills of the individual resident. A more senior fellow may be designated by the program director as a supervising physician when he/she has demonstrated the medical knowledge, procedural competency skill set, and supervisory capability to teach and oversee the work of junior fellows.

Each fellow must know the limits of his/her scope of authority, and the circumstances under which he/she is permitted to act with conditional independence.

MFM Fellow Supervision

1. Faculty Supervision

Faculty supervision assignments must be of sufficient duration to assess the knowledge and skills of each resident and to delegate to the resident the appropriate level of patient care authority and responsibility.

LEVELS OF SUPERVISION: Programs must use the following classification of supervision to promote oversight of resident supervision while providing for graded authority and responsibility:

DIRECT SUPERVISION – the supervising physician is physically present with the resident and patient.

INDIRECT SUPERVISION WITH DIRECT SUPERVISION **IMMEDIATELY** AVAILABLE – the supervising physician is physically within the hospital or other site of patient care, and *is immediately available to provide Direct Supervision*.

INDIRECT SUPERVISION WITH DIRECT SUPERVISION AVAILABLE – the supervising physician is not physically present within the hospital or other site of patient care, but ***is immediately available by means of telephonic and/or electronic modalities**, and is available to provide Direct Supervision*.

MFM Fellow Supervision

1. The attending faculty for a rotation/service is ultimately responsible for patient care and the supervision of fellows involved in patient care.
2. At integrated institutions (Baptist Memorial Hospital, Methodist Hospital Systems, & Le Bonheur Healthcare) the site director or his/her designee is responsible for patient care and the supervision of fellows involved in patient care of service patients. No patient receives care primarily by fellows. Other patients have a private attending physician responsible for the patient before entry into the hospital, during hospitalization, and following discharge. Under these circumstances, teaching faculty supervision is carried out by the patient's private physician. At all times, a member of the medical staff is available for back up supervision if the private attending physician is unavailable. At night, the in-house attending assumes this supervisory role.
3. It is the responsibility of the attending faculty to assure that fellows on a rotation/service understand the supervisory chain of command. They are also responsible for assuring that communication is maintained throughout the length of the rotation.
4. The attending faculty is to provide direction for rounds, patient care protocols and senior fellow supervision of junior level fellows.
5. Each patient care plan must be evaluated by the attending for appropriateness and documented in the progress notes within 24 hours following admission and at appropriate intervals during the patient's hospitalization.

MFM Fellow Supervision

2. Fellow Supervision

1. All fellows must understand that the attending faculty (as outlined in Faculty 1. and 2.) is ultimately responsible for the care of patients. At the same time, fellows are to take the lead role in the care of patients, understanding that patients have autonomy and are ultimately under the responsible care of the attending faculty.
2. Fellows must communicate with the attending, and receive instruction as to the supervisory chain of command at the beginning of a particular rotation.
3. Regardless of the rotation, fellows must maintain communication with the attending faculty as to the status of patients. They must inform the attending regarding new admissions, changes in health status of patients, surgical plans and emergencies.
4. The senior fellow on a rotation is responsible for the supervision of all junior level fellows and residents on the team. The senior fellow must maintain constant surveillance of the health status of patients and the roles of junior fellows and residents caring for them. Junior level fellows and residents are to communicate with the senior fellow regarding changes in patient health status. The senior fellow may then communicate to the attending. This line of communication provides the senior fellow with a supervisory/decision-making role.

MFM Fellow Supervision

5. Specific Situation:

a. Obstetrics

- Fellows are to notify the attending of all imminent deliveries
- The attending is to be consulted for all plans for cesarean section
- The attending is to be notified immediately of all complicated patients and emergencies

b. Surgery

- Faculty should be present for all surgeries, particularly for the major portion of the care
- Faculty will participate/scrub in the case to the extent they feel necessary, based on the complexity of the operation and the experiences of the fellow
- Fellows must understand that the attending is ultimately in charge of the conduct of an operation

c. Emergencies

- In the event of an emergency, fellows must act immediately to maintain the health status of a patient. Efforts must be made to notify the attending. These efforts should not interfere with the actions necessary to stabilize a patient.

d. Inability to contact attending

- In the event that the attending faculty for a rotation cannot be contacted, the fellow should contact the Division Director for the rotation. When unable to contact the Division Director, the Fellowship Training Program Director should be contacted.

While a “teaching institution” allows fellows to assume a significant role in patient care in order to foster their education and decision-making skills, they need to understand that a patient’s autonomy must be maintained. In addition, the attending faculty is ultimately the responsible physician for all patients.

MFM Fellow Supervision

2. Patient Care Setting Fellow Supervision

The following are minimum standards for fellow supervision and documentation in patient care settings. They are designed to promote patient safety, provide educational excellence, but maintain autonomy based on demonstrated educational competence.

All fellow's patient care activities are ultimately supervised by a credentialed and privileged attending physician.

| * Levels of Supervision Documentation: |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Departmental attending Physician Note |
| 2. Departmental attending Physician Addendum to the fellow's note (not a co-signature) |
| 3. Departmental attending physician Co-signature implies that the departmental attending physician has reviewed the fellow's note, and absent an addendum to the contrary, concurs with the content of the fellow's note. |
| 4. Fellow documentation of departmental attending physician supervision (e.g., "I have seen and/or discussed the patient with my departmental attending physician, Dr. __, who agrees with my assessment and plan.") |
| 5. Documentation to be determined by individual program director. |

| Supervision Setting / Clinical Activity | Required supervision Level / Description | *Minimum Level of Supervision Documentation |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| A. OPERATING / DELIVERY ROOM | <ul style="list-style-type: none"> Direct Supervision by Attending Physician Departmental attending must be physically present within the building where the procedure occurs and immediately available to the fellow and patient, for the major components of the procedure. The departmental attending must be notified prior to the scheduling of the procedure and must be aware of the documented competency level of the fellow. | Level 2-4 |
| B. EMERGENCY DEPARTMENT | <ul style="list-style-type: none"> Direct Supervision by Attending Physician Departmental attending must be physically present within the building where the procedure occurs and immediately available to the fellow and patient, for the major components of the procedure. The departmental attending must be notified prior to the scheduling of the procedure and must be aware of the documented competency level of the fellow. | Level 2-4 |
| C. EMERGENCY CARE - Immediate care is initiated to preserve life or prevent impairment. The procedure is initiated with the departmental attending physician contacted. | The departmental attending must be notified prior to the scheduling of the procedure. | Level 2-4 |
| In the following patient care settings, the Program Director may designate a more senior fellow to supervise a junior fellow. | | |
| D. INPATIENT CARE / New Admissions | <ul style="list-style-type: none"> Indirect Supervision with Direct Supervision Available. Oversight The departmental attending physician must see and evaluate the patient within one calendar day of | Level 2 |
| INPATIENT CARE / Continuing Care | <ul style="list-style-type: none"> Oversight | Level 2-4 |
| INPATIENT CARE / Intensive Care | <ul style="list-style-type: none"> Indirect with Direct Supervision immediately available | Level 1-4 |
| INPATIENT CARE / Hospital Discharge and Transfers | <ul style="list-style-type: none"> Oversight The departmental attending physician must see and evaluate the patient within one calendar day of admission. | Level 1-3 |
| E. OUTPATIENT CARE / New Patient Visit | <ul style="list-style-type: none"> Indirect with Direct Supervision immediately available | Level 2 |
| OUTPATIENT CARE / Return Patient Visit | <ul style="list-style-type: none"> Oversight | Level 1-4 |
| OUTPATIENT CARE / Clinic Discharge | <ul style="list-style-type: none"> Oversight | Level 1-4 |
| F. CONSULTATIONS - Inpatient, Outpatient and Emergency Department | <ul style="list-style-type: none"> Oversight Post-hoc review with feedback by supervising faculty physician | Level 4 |
| G. ROUTINE BEDSIDE and CLINIC PROCEDURES | <ul style="list-style-type: none"> Indirect Supervision with Direct Supervision Available. | Level 4 |

Clinical Rotations – Block Diagram

Year 1 – Clinical Rotation and Daily Schedule

| YEAR 1 Clinical Rotations | | | | | | | | | | | | | |
|---------------------------|--|----------|----------|-----------|----------|----------|----------|---------|----------|-------|----------|----------|----------|
| BLOCK | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| SITE | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 or 2 | 1 | 1 | 1 | 1 |
| | | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE |
| Rotation Name | | RESEARCH | RESEARCH | RESEARCH | GENETICS | TICU | MFM | MFM | US - 80 | L&D | RESEARCH | RESEARCH | RESEARCH |
| % Outpatients | | 10 | 10 | 10 | 10 | 0 | 40 | 40 | 20 | 10 | 10 | 10 | 10 |
| % Research | | 90 | 90 | 90 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 90 | 90 |

SITE 1: Regional One Hospital

SITE 2: Le Bonheur

| Rotation | Monday | Tuesday | Wednesday | Thursday | Friday | Notes |
|-----------------------|-------------------------|---------------|------------------|------------------|------------------|------------------------------------------------------------------------------------------------------------------|
| MFM | L&D or High Risk Clinic | Medplex US PM | High Risk Clinic | High Risk Clinic | CHRP | |
| US 1st year fellow | Fetal Center | CHRP PM | Fetal Center | Medplex US | Medplex US | US fellow will be assigned to all procedures. If there is no US fellow, the procedure will go to the MFM fellow. |
| Research | Research | Research | Research | Research | ID/Fellow Clinic | When there is no research fellow, the US fellow will be schedule in the ID clinic. |

MFM Fellow – Core Competency Objectives

Year 1 – By the end of the yearly rotation, the 1st year MFM fellow will be able to:

| Competency | Objectives |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Patient Care | <ul style="list-style-type: none"> • Demonstrates a comprehensive understanding of the presentation of and treatment options for common obstetrical complications (e.g., pre-eclampsia, obstetric hemorrhage, preterm labor) • Develops a management strategy for patients with common obstetrical complications • Demonstrates an understanding of the presentation of and treatment options for complex obstetrical complications (e.g., amniotic fluid embolism, periviability) • Demonstrates a comprehensive understanding of the presentation of and treatment options for common medical comorbidities in pregnancy (e.g., diabetes, chronic hypertension) • Develops a management strategy for patients with common medical comorbidities in pregnancy • Demonstrates an understanding of the presentation of and treatment options for complex medical comorbidities in pregnancy (e.g., sepsis, solid-organ transplant, cardiac disease) |
| Medical Knowledge | <ul style="list-style-type: none"> • Demonstrates knowledge of maternal physiologic adaptations to pregnancy • Demonstrates knowledge of fetal physiology • Demonstrates knowledge of common obstetrical complications (e.g., pre-eclampsia, obstetric hemorrhage, preterm labor) • Applies knowledge of common obstetrical complications • Demonstrates knowledge of treatment modalities of common obstetrical complications (e.g., blood transfusion, corticosteroids) • Demonstrates knowledge of basic genetic principles and common hereditary syndromes • Demonstrates knowledge of basic genetic screening and diagnostic tests • Applies knowledge of basic genetics to patient counseling (e.g., AMA, soft markers) • Applies knowledge of basic genetic screening and diagnostic tests |

| Competency | Objectives |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interpersonal and Communication Skills | <ul style="list-style-type: none"> • Describe the importance of relationship development, information gathering and sharing, and teamwork • Demonstrates an understanding of the roles of health care team members, and communicates effectively within the team • Demonstrates an understanding of transitions of care and team debriefing • Demonstrates adequate listening skills • Communicates effectively in routine clinical situations • Checks for patient and family understanding of illness and management plan • Allows for opportunities for patient questions • Maintains communication with patient and family regarding plan of care |
| Professionalism | <ul style="list-style-type: none"> • Demonstrates integrity, respect, honesty, and compassion • Discusses HIPAA policies and appropriate use concepts • Demonstrates timeliness in completion of assigned rotations, reports, state licensure, and duties • Is accountable in completion of duties, records, and patient care • Is sensitive and responsive to diverse patient population and needs, regardless of gender, age, race, sexual orientation, religion, or disabilities • Demonstrates knowledge of regulations for billing and coding • Describes the importance of compassion, integrity, and respect for others • Demonstrates sensitivity and responsiveness to patients • Consistently shows compassion, integrity, and respect in typical situations with patients, peers, and members of the health care team • Consistently demonstrates sensitivity and responsiveness to diversity of patients' ages, cultures, races, religions, abilities, or sexual orientations • Accepts constructive feedback to improve his or her ability to demonstrate compassion, integrity, and respect for others |

| Competency | Objectives |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Systems-based Practice | <ul style="list-style-type: none"> • Retrieves basic patient information from the electronic medical record (EMR) • Retrieves complex patient information from the EMR • Demonstrates knowledge of maternal-fetal medicine guideline-based care (e.g., Society for Maternal-Fetal Medicine [SMFM] practice guidelines and American Institute of Ultrasound in Medicine [AIUM] guidelines) • Demonstrates knowledge of cost related to diagnostic and treatment plans • Demonstrates knowledge of personnel and resources needed to facilitate value-based (high quality, cost-effective) care • Compose letters to consulting physicians |

Clinical Rotations – Block Diagram

Year 2 – Clinical Rotation and Daily Schedule

| YEAR 2 | | | | | | | | | | | | | |
|---------------|--|---------|--------|----------------|---------|----------|----------|----------|----------|----------|-------|-----|------|
| BLOCK | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| SITE | | 1 or 2 | 1 | 1 | 1 | 1 or 2 | 1 or 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE |
| Rotation Name | | US - 80 | MFM | PATH/NEO/ANESH | MFM | US - 80 | US - 80 | RESEARCH | RESEARCH | RESEARCH | L&D | MFM | MFM |
| % Outpatients | | 20 | 40 | 10 | 40 | 20 | 20 | 10 | 10 | 10 | 10 | 40 | 40 |
| % Research | | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 90 | 90 | 0 | 0 | 0 |

SITE 1: Regional One Hospital

SITE 2: Le Bonheur

| Rotation | Monday | Tuesday | Wednesday | Thursday | Friday | Notes |
|-----------------------|-------------------------|---------------|------------------|------------------|------------------|------------------------------------------------------------------------------------------------------------------|
| MFM | L&D or High Risk Clinic | Medplex US PM | High Risk Clinic | High Risk Clinic | CHRP | |
| US 2nd year fellow | Fetal Center | CHRP PM | Fetal Center | Medplex US | Medplex US | US fellow will be assigned to all procedures. If there is no US fellow, the procedure will go to the MFM fellow. |
| Research | Research | Research | Research | Research | ID/Fellow Clinic | When there is no research fellow, the US fellow will be schedule in the ID clinic. |

MFM Fellow – Core Competency Objectives

Year 2 – By the end of the yearly rotation, the 2nd year MFM fellow will be able to:

| Competency | Objectives |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Patient Care | <ul style="list-style-type: none"> Manages complex obstetrical complications, with supervision Collaborates with and provides evidence-based subspecialty-specific consultation to other members of the health care team, with supervision Manages complex medical comorbidities in pregnancy, with supervision Co-manages patients in critical care settings, with supervision Collaborates with and provides evidence-based subspecialty-specific consultation to other members of the health care team, with supervision |
| Medical Knowledge | <ul style="list-style-type: none"> Demonstrates knowledge of clinicopathologic correlation between adverse perinatal outcome and specific etiologies (e.g., infection, aneuploidy, medical disease) Demonstrates knowledge of common medical comorbidities that can affect obstetrical outcomes (e.g., diabetes, hypertension, asthma) Applies knowledge of common medical comorbidities to optimize obstetrical outcomes Demonstrates knowledge of treatment modalities of common medical comorbidities in pregnancy (e.g., pharmacology, contraindications) Demonstrates knowledge of treatment modalities of complex medical comorbidities in pregnancy (e.g., pharmacology, contraindications) Demonstrates knowledge of critical care management (e.g., ventilation, hemorrhagic shock, sepsis) Demonstrates knowledge of treatment modalities of complex obstetrical complications (e.g., pharmacology, contraindications) Demonstrates knowledge of advanced genetic principles and uncommon hereditary syndromes Demonstrates knowledge of advanced genetic testing |
| Practice-based Learning and Improvement | <ul style="list-style-type: none"> Displays effective teamwork skills Organizes didactic educational activities, including determination of educational content |

| Competency | Objectives |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interpersonal and Communication Skills | <ul style="list-style-type: none"> Works effectively in interprofessional and interdisciplinary health care teams Participates in effective transitions of care and team debriefing Communicates effectively with physicians and other health care professionals regarding patient care Communicates effectively with patients and families across a broad range of socio-economic and cultural backgrounds Communicates effectively when counseling patients and families in stressful, emergent, and complex situations (e.g., complications, poor prognosis, perinatal death, pregnancy termination) |
| Professionalism | <ul style="list-style-type: none"> Acknowledges errors with program director, faculty members, and/or patients Responds well to constructive criticism Takes on responsibility related to learning, coordination of care, patient care, Continuous Quality Improvement (CQI), and compliance issues Consistently shows compassion, integrity, and respect for patients who decline medical advice, request unindicated tests or treatments, or have psychiatric comorbidities, and for team members experiencing conflict or high stress Modifies his or her own behavior based on feedback to improve his or her ability to demonstrate compassion, integrity, and respect for others |
| Systems-based Practice | <ul style="list-style-type: none"> Generates orders, communicates with referring physicians, and documents communication with patients Applies knowledge of maternal-fetal medicine guideline-based care, with supervision Incorporates cost-awareness into the development of diagnostic and treatment plans, with supervision (e.g., formulary drugs, generic drugs, tailoring of diagnostic tests) Coordinates personnel and resources to facilitate value-based care, with supervision |

Clinical Rotations – Block Diagram

Year 3 – Clinical Rotation and Daily Schedule

| YEAR 3 | | | | | | | | | | | | | |
|---------------|--|------|---------|-----------|----------|----------|----------|---------|----------|---------|----------|----------|----------|
| BLOCK | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| SITE | | 1 | 1 or 2 | 1 | 1 | 1 | 1 | 1 or 2 | 1 | 1 or 2 | 1 | 1 | 1 |
| | | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE |
| Rotation Name | | MFM | US - 80 | MFM | RESEARCH | RESEARCH | RESEARCH | US - 80 | MFM | US - 80 | RESEARCH | RESEARCH | RESEARCH |
| % Outpatients | | 40 | 20 | 40 | 10 | 10 | 10 | 20 | 40 | 20 | 10 | 10 | 10 |
| % Research | | 0 | 0 | 0 | 90 | 90 | 90 | 0 | 0 | 0 | 90 | 90 | 90 |

SITE 1: Regional One Hospital

SITE 2: Le Bonheur

| Rotation | Monday | Tuesday | Wednesday | Thursday | Friday | Notes |
|-----------------------|-------------------------|---------------|------------------|------------------|------------------|------------------------------------------------------------------------------------------------------------------|
| MFM | L&D or High Risk Clinic | Medplex US PM | High Risk Clinic | High Risk Clinic | CHRP | |
| US 3rd year fellow | Fetal Center | CHRP PM | Fetal Center | Medplex US | Medplex US | US fellow will be assigned to all procedures. If there is no US fellow, the procedure will go to the MFM fellow. |
| Research | Research | Research | Research | Research | ID/Fellow Clinic | When there is no research fellow, the US fellow will be schedule in the ID clinic. |

MFM Fellow – Core Competency Objectives

Year 3 – By the end of the yearly rotation, the 3rd year MFM fellow will be able to:

| Competency | Objectives |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Patient Care | <ul style="list-style-type: none"> Independently manages complex obstetrical complications Independently collaborates with and provides evidence-based subspecialty-specific consultation to other members of the health care team Independently manages complex medical co- morbidities in pregnancy Co-manages patients in critical care settings Independently collaborates with and provides evidence-based subspecialty-specific consultation to other members of the health care team |
| Medical Knowledge | <ul style="list-style-type: none"> Applies knowledge of clinicopathologic findings to optimize perinatal outcomes Applies knowledge of maternal pelvic anatomy to the management of complex obstetric procedures and complications Applies knowledge of complex medical comorbidities and treatment modalities that can affect obstetrical outcomes Applies knowledge of critical care management to optimize patient outcomes Applies knowledge of complex obstetrical complications and treatment modalities Applies knowledge of advanced genetic principles to provide comprehensive counselling to patients and their families Applies knowledge of advanced genetic principles to optimize perinatal outcomes |
| Practice-based Learning and Improvement | <ul style="list-style-type: none"> Advises and provides guidance to junior colleagues and other team members Provides advanced clinical teaching of residents Identifies deficiencies in educational curriculum and develops modifications |

| Competency | Objectives |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interpersonal and Communication Skills | <ul style="list-style-type: none"> Leads interprofessional and interdisciplinary health care teams to achieve optimal outcomes Leads effective transitions of care and team debriefing Responds to requests for consultation in a timely manner, and communicates recommendations to the requesting team Role models effective communication Capable of informing patients and families about a medical error that caused harm |
| Professionalism | <ul style="list-style-type: none"> Serves as a role model for honesty, integrity, professionalism, and compassionate patient care Demonstrates commitment to self- improvement Prioritizes and advocates for patient needs over self- interest Operates professionally and independently in various educational and patient care environments Consistently models compassion, integrity, and respect for others Coaches others to improve compassion, integrity, and respect for patients |
| Systems-based Practice | <ul style="list-style-type: none"> Uses EMR to its full potential and facilitates integration of computer- based communication with team Demonstrates knowledge of general obstetrics and gynecology guideline- based care (e.g., American College of Obstetricians and Gynecologists [ACOG] publications) Demonstrates knowledge of the importance of providing cost-effective care Describes the diversity and roles of all members of the health care team Independently applies knowledge of maternal- fetal medicine guideline- based care Independently incorporates cost- awareness into the development of diagnostic and treatment plans Independently coordinates personnel and resources to facilitate value-based care |

MFM Fellow – Description of Clinical Rotation Supervision

MFM Service

- Antepartum ward rounds with the MFM attending and Ob/Gyn residents. During these morning rounds, didactics and clinical teaching is provided to the fellows. These clinical rounds deal with all aspects of the antepartum and high-risk management of pregnant patients.
- The High-Risk Clinic: In this clinic, the fellow is supervised by Dr. Danielle Tate. Fellows have the opportunity to be involved in the care and management of these patients. One fellow will attend this clinic every week and participate in antiretroviral therapy selection.
- The Consult Clinic: The consults are referred from both private and resident practice. Fellows meet with high-risk patients (between 40 and 60 minutes for each patient) to discuss the risks and possible complications of pregnancy associated with the patient's particular medical complications or concerns. An MFM faculty member supervises these consults. A written consult letter, structured to include a discussion of the recent literature, is then generated with the MFM attending.
- Labor and Delivery: Ob/Gyn faculty will supervise the fellow when on L&D. An MFM faculty will always be available to discuss and manage complicated cases with the fellow and other Ob/Gyn physicians.
- In-house call, fellows are supervised at all times by a faculty member who is available for consultation, discussion, and advice regarding management options. An MFM faculty will always be available to discuss and manage complicated cases with the fellow and the other Ob/Gyn physicians.

MFM Fellow – Description of Clinical Rotation Supervision

Ultrasound Service (includes Prenatal Diagnosis)

- The Ultrasound Services provides for both inpatient and outpatient high-risk pregnancies. The team consists of sonographers, the fellow, and a supervising Maternal-Fetal Medicine attending or Dr. Owen Phillips, who is board certified in obstetrics and gynecology, as well as in medical genetics.
- During the Ultrasound Services rotation, the fellow is exposed to obstetrical ultrasound; genetic counseling; Doppler ultrasonography; diagnosis and management of fetal anomalies, IUGR, and fetuses at risk for anemia; first and second trimester screenings; consultations; A MFM faculty or Dr. Phillips will supervise the fellow at all times. During this rotation, the fellow is also exposed to fetal echocardiography performed by a MFM faculty or a pediatric cardiologist.
- During this rotation, the fellow will also perform invasive procedures such as amniocenteses, cordocenteses, transfusions, CVS, and other fetal interventions (thoracenteses, etc.) under the supervision of an MFM attending or Dr. Owen Phillips. The fellows can rotate with Dr. Phillips, who will see patients specifically at risk for genetic disease, and will learn counseling and CVS skills. These are patients referred from private practice.
- Fellows participate in the above-described activities, with progressive involvement from hands-on experience in the first year, to a consultative role in the second year, while adding invasive procedures by the third year. Fellows will be encouraged to obtain nuchal translucency certification during fellowship.

MFM Fellow – Description of Clinical Rotation Supervision

Neonatology/NICU

- During the Neonatology/NICU rotation, the fellow will be supervised by Dr. Ramasubbareddy Dhanireddy, who is the Director of Neonatology, and Dr. Ajay Talati, Director of the Neonatology Fellowship, who have agreed to provide appropriate supervision of MFM fellows who rotate in the NICU. Dr. Dhanireddy will be responsible for the day-to-day activities of the fellow and will coordinate the rotation of the fellows to ensure that the goals and objectives described in “Guide to Learning in Maternal-Fetal Medicine” are met during the course of this educational experience. Dr. Dhanireddy or Dr. Talati will provide written evaluation of the fellow at the end of the rotation.

Obstetrical Anesthesia

- During the Anesthesia rotation, fellows will be supervised by Dr. Jaya Ramanathan, Professor of Anesthesia. She will be responsible for the day-to-day activities of the fellow and will coordinate the rotation of the fellows to ensure that the goals and objectives described in “Guide to Learning in Maternal-Fetal Medicine” are met during the course of this educational experience. Dr. Ramanathan will provide written evaluation of the fellow at the end of the rotation.

MFM Fellow – Description of Clinical Rotation Supervision

Pathology

- During the Pathology rotation (specifically focusing on Perinatal Pathology), fellows will be supervised by Dr. Jie Zhang. She will be responsible for the day-to-day activities of the fellow and will coordinate the rotation of fellows to ensure that the goals and objectives described in “Guide to Learning in Maternal-Fetal Medicine” are met during the course of this educational experience. Dr. Zhang will provide written evaluation of the fellow at the end of the rotation.

Genetics

- During the Genetics rotation, fellows will be supervised by Eniko Pivnick, MD, Professor in the Department of Pediatrics. Dr. Pivnick will be responsible for the day-to-day activities of the fellow and will coordinate the rotation of fellows to ensure that the goals and objectives described in “Guide to Learning in Maternal-Fetal Medicine” are met during the course of this educational experience. Dr. Pivnick will provide written evaluation of the fellow at the end of the rotation.

MFM Fellow – Description of Clinical Rotation Supervision

Trauma Intensive Care Unit

- During TICU rotation, fellows will be supervised by Dr. Martin Croce, Professor and Chief of the Surgical Critical Care, or his designee, will be responsible for the day-to-day activities of the fellow and will coordinate the rotation of fellows to ensure that the goals and objectives described in “Guide to Learning in Maternal-Fetal Medicine” are met during the course of this educational experience. Dr. Croce or his designee will provide written evaluation of the fellow at the end of the rotation.

Research

- During the 15 months dedicated to Research, a faculty member (mentor) will direct the fellow’s research efforts. The structure of the Research Program will be organized by the fellow’s mentor, who will supervise the fellow with frequent interactions and meetings. The Program Director will hold discussions with the fellow’s mentor at least every 3 months to ensure that the goals and objectives are met as described in “Guide to Learning in Maternal-Fetal Medicine”. The fellow’s mentor will provide a written evaluation of the fellow’s research at the end of the Research rotation.

Assessment Tools

Maternal-Fetal Medicine Fellowship
The University of Tennessee Health Science Center – Memphis
Fellow Clinical Rotation Evaluation Form

Fellow: _____
PGY (5/6/7): _____
Attending: _____
Rotation: _____
Rotation Dates: _____
Evaluation Date: _____

INSTRUCTIONS: Check the numerical rating best matching the fellow's skills and abilities with the description given for each component of clinical competence. Evaluate the fellow's ability to carry out the clinical tasks and provide substantive comments for each assessment. Cite major strengths and weaknesses.

Rating Scale:
1 = Unsatisfactory, needs immediate counseling
2 = Marginal, often falls short of expectations
3 = Satisfactory, but needs improvement
4 = Very good most of the time
5 = Very good to outstanding all of the time, highly competent and consistent

COMPETENCY 1: PATIENT CARE

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

1 2 3 4 5

Fellows are expected to communicate effectively and demonstrate caring and respectful behaviors.

1 2 3 4 5

Gather essential and accurate information.

1 2 3 4 5

Make informed decisions about diagnostic and therapeutic interventions based on scientific evidence and clinical judgment.

1 2 3 4 5

Develop and carry out patient management plans.

1 2 3 4 5

Counsel and educate patients and their families.

1 2 3 4 5

Perform competently all medical and invasive procedures.

1 2 3 4 5

Provide health care services aimed at maintaining health.

1 2 3 4 5

Comments:

COMPETENCY 2: MEDICAL KNOWLEDGE

Demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

1 2 3 4 5

Demonstrate an investigatory and analytic thinking approach to clinical situations; and know and apply the basic and clinically supportive sciences, which are appropriate to their discipline.

1 2 3 4 5

Comments:

COMPETENCY 3: PRACTICE-BASED LEARNING AND IMPROVEMENT

Investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices.

1 2 3 4 5

Analyze practice experience and perform practice-based improvement activities.

1 2 3 4 5

Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems.

1 2 3 4 5

Obtain and use information about their own population of patients and the larger population from which their patients are drawn.

1 2 3 4 5

Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.

1 2 3 4 5

Use information technology to manage information, access on-line medical information.

1 2 3 4 5

Facilitate the learning of students and other health care professionals.

1 2 3 4 5

Comments:

Assessment Tools

COMPETENCY 4: INTERPERSONAL AND COMMUNICATION SKILLS

Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates.

1 2 3 4 5

Create and sustain an ethically sound relationship with patients.

1 2 3 4 5

Use effective listening skills, elicit and provide information using effective nonverbal, explanatory, questioning, and writing skill:

1 2 3 4 5

Work effectively with others as a member or leader of a health care team or other professional group.

1 2 3 4 5

Comments:

COMPETENCY 5: PROFESSIONALISM

Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

1 2 3 4 5

Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.

1 2 3 4 5

Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.

1 2 3 4 5

Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.

1 2 3 4 5

Comments:

COMPETENCY 6: SYSTEM-BASED PRACTICE

Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call system resources to provide care that is of optimal value.

1 2 3 4 5

Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.

1 2 3 4 5

Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.

1 2 3 4 5

Practice cost-effective health care and resource allocation that does not compromise quality of care.

1 2 3 4 5

Advocate for quality patient care and assist patients in dealing with system complexities.

1 2 3 4 5

Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.

1 2 3 4 5

Comments:

OVERALL CLINICAL COMPETENCE

1 2 3 4 5

Comments:

Did you review this evaluation with the fellow? Yes No

Fellow's Signature _____

Date _____

Attending's Signature _____

Date _____

MFM Fellow – Duty Hours

Reporting Duty Hours

- Duty Hours should be reported daily (no less than weekly) in New Innovations
 - This includes: Shift hours, annual leave, sick leave, and educational leave as well as moonlighting hours.

Monitoring of Duty Hours

- Weekly (every Monday) the Program Coordinator will check to ensure that all fellows have logged their duty hours for the previous week.
- For each violation, the Program Coordinator will enter a comment into New Innovations that describes the action taken to remedy the violation.

Failure to Report Duty Hours

- After 6 days of not logging duty hours the fellow will receive an automatic email from New Innovations (Program Director copied) regarding their delinquent hours.
- After 12 days of not logging duty hours the fellow will receive an official notification via email regarding their delinquent hours notifying them that they will be placed on leave without pay if their hours are not updated by the following week.
 - If a fellow is placed on leave without pay they are no longer covered by the Tennessee Claims Commission Act (TCA 9-8-301 et seq.) and may not continue to work.
 - Being on leave without pay may affect your insurance benefits and your training completion date.
 - You will be notified in writing prior to being able to return to work.

MFM Fellow – Duty Hours

Duty Hour Violation

- For each violation that is entered the fellow MUST select a cause from the drop down list provided in New Innovations and submit a justification for review to the Program Coordinator.
- All late notifications will be presented to your advisor during your mid-year evaluations and end of year evaluations. If there is a second occasion of untimely or inaccurate fellow duty hour entries leave without pay, a three-month remediation plan and any deviation from the policy may result in dismissal.

Maximum Hours of Work per Week

- Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities and all moonlighting.

Duty Hour Exceptions

- A Review Committee may grant exceptions for up to 10% or a maximum of 88 hours to individual programs based on a sound educational rationale.
 - In preparing a request for an exception the program director must follow the duty hour exception policy from the ACGME Manual on Policies and Procedures.
 - Prior to submitting the request to the Review Committee, the program director must obtain approval of the Institution's GMEC and DIO.

Moonlighting

- Moonlighting must not interfere with the ability of the fellow to achieve the goals and objectives of the educational program.
- Time spent by fellows in Moonlighting (as defined in the ACGME Glossary of Terms) must be counted towards the 80-hour Maximum Weekly Hour Limit.

MFM Fellow – Duty Hours

Mandatory Time Free of Duty

- Fellows must be scheduled for a minimum of one day free of duty every week (when averaged over four weeks). At-home call cannot be assigned on these free days.

Maximum Duty Period Length

- Duty periods of fellows may be scheduled to a maximum of 24 hours of continuous duty in the hospital. Programs must encourage fellows to use alertness management strategies in the context of patient care responsibilities. Strategic napping, especially after 16 hours of continuous duty and between the hours of 10:00 p.m. and 8:00 a.m., is strongly suggested.
 - It is essential for patient safety and fellow education that effective transitions in care occur. Fellows may be allowed to remain on-site in order to accomplish these tasks; however, this period must be no longer than an additional four hours
 - Fellows must not be assigned additional clinical responsibilities after 24 hours of continuous in-house duty.
 - In unusual circumstances, fellows, on their own initiative, may remain beyond their scheduled period of duty to continue to provide care to a single patient. Justifications for such extensions of duty are limited to reasons of required continuity for a severely ill or unstable patient, academic importance of the events transpiring, or humanistic attention to the needs of a patient or family.
 - Under those circumstances, the fellow must:
 - appropriately hand over the care of all other patients to the team responsible for their continuing care; and,
 - document the reasons for remaining to care for the patient in question and submit that documentation in every circumstance to the program director. The program director must review each submission of additional service, and track both individual resident and program-wide episodes of additional duty

Minimum Time Off between Scheduled Duty Periods

- Fellows in the final years of education [as defined by the Review Committee] must be prepared to enter the unsupervised practice of medicine and care for patients over irregular or extended periods. This preparation must occur within the context of the 80-hour, maximum duty period length, and one-day-off-in seven standards. While it is desirable that fellows in their final years of education have eight hours free of duty between scheduled duty periods, there may be circumstances when these fellows must stay on duty to care for their patients or return to the hospital with fewer than eight hours free of duty. Circumstances of return-to-hospital activities with fewer than eight hours away from the hospital by fellows in their final years of education must be monitored by the program director.

MFM Fellow – Duty Hours

Maximum In-House On-Call Frequency

- Fellows must be scheduled for in-house call no more frequently than every-third-night (when averaged over a four-week period).

At-Home Call

- Time spent in the hospital by fellows on at-home call must count towards the 80-hour maximum weekly hour limit. The frequency of at-home call is not subject to the every-third-night limitation, but must satisfy the requirement for one-day-in-seven free of duty, when averaged over four weeks. At-home call must not be so frequent or taxing as to preclude rest or reasonable personal time for each fellow. Fellows are permitted to return to the hospital while on at-home call to care for new or established patients. Each episode of this type of care, while it must be included in the 80-hour weekly maximum, will not initiate a new “off-duty period”.

Experimentation and Innovation

- Requests for experimentation or innovative projects that may deviate from the institutional, common and/or specialty specific program requirements must be approved in advance by the Review Committee. In preparing requests, the program director must follow Procedures for Approving Proposals for Experimentation or Innovative Projects located in the ACGME Manual on Policies and Procedures. Once a Review Committee approves a project, the sponsoring institution and program are jointly responsible for the quality of education offered to fellows for the duration of such a project.

MFM Fellow – Moonlighting

Moonlighting is defined as any professional activity outside the course and scope of a fellows' approved training program. Moonlighting is allowed, but will not be encouraged due to the potential negative impact such activities may have on educational growth as well as the challenges it presents in complying with the ACGME 2011 approved Common Program Requirements related to duty hour standards, fatigue management, and fitness for duty. Fellows should not participate in moonlighting if it violates the GME duty hour scheduling and reporting requirements as described below.

- Moonlighting must count toward the 80-hour maximum weekly limit on duty hours.
 - Program Director must approve a fellow's request to moonlight in advance
 - J1 or J-2 visas cannot moonlight
 - Violations of the policy may result in disciplinary action, including loss of moonlighting privileges, suspension, or dismissal from the program
 - The University does not provide professional liability insurance coverage for moonlighting
- To qualify for moonlighting the fellow must have:
 - An active, unencumbered license to practice medicine granted by the state in which the moonlighting is to occur, allowing for unsupervised medical practice
 - A valid Drug Enforcement Administration (DEA) number, not just the prefix of the major participating institution or other clinical site DEA number
 - Prior approval must be obtained from the program director for a specific site, using forms provided for moonlighting with copies of licensure, DEA number, and any other required documentation.
 - Fellow physicians must complete the application regarding the amount of hours and/or shifts for an estimate of the amount of time spent in moonlighting activities.
 - Approval for the same clinical site must be renewed annually.
 - Any change in the clinical site requires separate prior approval from the program director.
 - Fellows must re-apply for approval for a clinical site when the effective date of the current application has expired.
 - The program director will keep the written approval to moonlight in the fellows' physician's file.
 - The program director is responsible for evaluating the appropriateness of a moonlighting request
 - A copy of all documentation will be kept in the fellows' physician's program files.
 - Institutions hiring the fellow physicians to moonlight must ensure that licensure is in place, adequate liability coverage is provided, and the fellow physician has appropriate training and skills to carry out duties.

MFM Fellow – Grievances

Fellows may raise and resolve issues without fear of intimidation or retaliation. The Department, DIO and the chair of the Graduate Medical Education Committee maintain an open door policy. Additional mechanisms for communicating and resolving issues include the following:

- Grievances regarding academic or other disciplinary actions are processed according to the Graduate Medical Education Academic Appeal Policy available on the GME website.
- Grievances related to the work environment or issues concerning the program or faculty that are not related to disciplinary or academic adverse actions can be addressed by discussing problems with a chief resident, program director, departmental chair, individual program education committees, or resident members of the GME Committee, or GME Administration.
- GMEC resident representatives host a Housestaff Association Open Forum once a year. This resident-led forum provides an opportunity for all housestaff to discuss issues or topics of mutual concern. Residents are encouraged to contact members of the Advisory Council to express concerns or to provide input regarding educational issues, the work environment, or other areas of concern. The names of Council members are available on the GME website at www.uthsc.edu/gme.
- Fellows may also submit comments or concerns anonymously through the Fellow Comment Form on the GME website.

Any complaints of illegal discrimination are processed in accordance with the University's EEO/Affirmative Action policies and should be directed to the Office of Equity and Diversity, 910 Madison Avenue, Suite 826; 901-448-211

MFM Fellow – Resources

- AIUM Educational Material (videos)
- Educational facilities (classrooms, libraries, audiovisual/teleconference center on campus)
- Biostatisticians and Statisticians in OB/GYN department and on campus
- Departmental library, comprehensive library on campus
- Departmental conference and classroom
- Departmental and campus computer access
- University online training and courses
- In-patient and Out-patient Obstetrical Facilities
- 3 Level Nursery
- ICU Units (MICU, SICU)
- Infectious Disease Clinic
- Special Care Clinic
- Le Bonheur Fetal Center
- Research laboratory
- One centrifuge and two refrigerated centrifuges
- Two -70° C freezers

MFM Fellow – Resources



Log in

- Go to New Innovations website: <http://www.new-innov.com/Login/Login.aspx>
 - Institution: UTHSC
 - Username
 - Password (default password – first initial and last name) lowercase no spaces
- Login is case sensitive – all lowercase
- Change password

Use of New Innovations

- Log duty hours weekly – required
- Complete evaluations – required
- Enter scholarly activities – required
- Review and confirm curriculum – if required by the program
- Log procedures – if required by the program
- Enter assignments/leave requests – if required by the program
- Enter conference attendance – if required by the program
- Complete other tasks as requested by GME or program

Contact your Program Coordinator or GME Coordinator Karey Conlee if you have any questions or need additional assistance.



Log in

- Go to Qgenda website: <http://uthscobgyn.qgenda.com/>
 - Under Schedule by Sections – Click on the link

Viewing the schedule does not require an account with QGenda.

Tutorials for the QGenda system can be found on the UTHSC Ob/Gyn site or at: <http://youtube.qgenda.com/>

If you have any questions, feel free to contact David Glore at 448-1730 or, you can call QGenda customer support at (770)399-9945, Ext. 2.

MFM Fellow – Resources

| Name | Title | Email | Phone |
|-------------------------|--------------------------------------------------------|------------------------------------------------------------|--------------|
| Giancarlo Mari, MD, MBA | Professor and Chair MFM Fellowship Program Director | gmari@uthsc.edu | 901.448.2531 |
| Norm Meyer, MD | Professor and Vice Chair | nmeyer@uthsc.edu | 901.448.4773 |
| Jacques Samson, MD | Assistant Professor | jsamson@uthsc.edu | 901.448.4780 |
| Mauro H. Schenone, MD | Assistant Professor MFM Fellowship Program Director | mschenon@uthsc.edu | 901.448.1829 |
| Danielle Tate, MD | Assistant Professor | dtate5@uthsc.edu | 901.448.7479 |
| Jose Duncan, MD | MFM Fellow | jdunca48@uthsc.edu | 901.448.1829 |
| Fernand Samson, MD | MFM Fellow | fsamson@uthsc.edu | 901.448.1829 |
| Michael Aziz, MD | MFM Fellow | maziz5@uthsc.edu | 901.448.1829 |
| Randy Conway | Director | rcondway@uthsc.edu | 901-448-1373 |
| Annette Hickerson | Research Nurse Coordinator | abpayne@uthsc.edu | 901-448-4784 |
| Julienne Watkins | MFM Fellowship Coordinator | jwatki14@uthsc.edu | 901.448.1053 |
| LaTanya Spikenard | Administrative Service Assistant | lspikena@uthsc.edu | 901.448.2531 |

Clinical Rotations – 3 Year Block Diagram

University of Tennessee Health Science Center - Maternal Fetal Medicine Block Diagram

| YEAR 1 | | | | | | | | | | | | | |
|---------------|----------|----------|-----------|----------|----------|----------|---------|----------|-------|----------|----------|----------|--|
| BLOCK | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| SITE | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 or 2 | 1 | 1 | 1 | 1 | |
| | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE | |
| Rotation Name | RESEARCH | RESEARCH | RESEARCH | GENETICS | TICU | MFM | MFM | US - 80 | L&D | RESEARCH | RESEARCH | RESEARCH | |
| % Outpatients | 10 | 10 | 10 | 10 | 0 | 40 | 40 | 20 | 10 | 10 | 10 | 10 | |
| % Research | 90 | 90 | 90 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 90 | 90 | |

| YEAR 2 | | | | | | | | | | | | | |
|---------------|---------|--------|----------------|---------|----------|----------|----------|----------|----------|-------|-----|------|--|
| BLOCK | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| SITE | 1 or 2 | 1 | 1 | 1 | 1 or 2 | 1 or 2 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE | |
| Rotation Name | US - 80 | MFM | PATH/NEO/ANESH | MFM | US - 80 | US - 80 | RESEARCH | RESEARCH | RESEARCH | L&D | MFM | MFM | |
| % Outpatients | 20 | 40 | 10 | 40 | 20 | 20 | 10 | 10 | 10 | 10 | 40 | 40 | |
| % Research | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 90 | 90 | 0 | 0 | 0 | |

| YEAR 3 | | | | | | | | | | | | | |
|---------------|------|---------|-----------|----------|----------|----------|---------|----------|---------|----------|----------|----------|--|
| BLOCK | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| SITE | 1 | 1 or 2 | 1 | 1 | 1 | 1 | 1 or 2 | 1 | 1 or 2 | 1 | 1 | 1 | |
| | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE | |
| Rotation Name | MFM | US - 80 | MFM | RESEARCH | RESEARCH | RESEARCH | US - 80 | MFM | US - 80 | RESEARCH | RESEARCH | RESEARCH | |
| % Outpatients | 40 | 20 | 40 | 10 | 10 | 10 | 20 | 40 | 20 | 10 | 10 | 10 | |
| % Research | 0 | 0 | 0 | 90 | 90 | 90 | 0 | 0 | 0 | 90 | 90 | 90 | |

SITE 1: Regional One Hospital

SITE 2: Le Bonheur

Fellows will cover Baptist and Methodist Germantown during calls and rounds on the weekends

Clinical Rotations – Daily Schedule

| <u>Daily Rotation Schedule</u> | | | | | | |
|--------------------------------|-------------------------|---------------|------------------|------------------|------------------|------------------------------------------------------------------------------------------------------------------|
| Rotation | Monday | Tuesday | Wednesday | Thursday | Friday | Notes |
| MFM | L&D or High Risk Clinic | Medplex US PM | High Risk Clinic | High Risk Clinic | CHRP | |
| US 1st year fellow | Fetal Center | CHRP PM | Fetal Center | Medplex US | Medplex US | US fellow will be assigned to all procedures. If there is no US fellow, the procedure will go to the MFM fellow. |
| US 2nd year fellow | Fetal Center | CHRP PM | Fetal Center | Medplex US | Medplex US | |
| US 3rd year fellow | Fetal Center | CHRP PM | Fetal Center | Medplex US | Medplex US | |
| Research | Research | Research | Research | Research | ID/Fellow Clinic | When there is no research fellow, the US fellow will be schedule in the ID clinic. |