MATERNAL FETAL MEDICINE PROGRAM

SUBSPECIALITY TRAINING PROGRAM

The training for Maternal Fetal Medicine will be per the Royal College of Physicians and Surgeons of Canada’s **SUBSPECIALTY TRAINING REQUIREMENTS IN MATERNAL FETAL MEDICINE**, July 1, 2007.

It will consist of twenty four (24) periods of approved residency training. This period must include:

- Six (6) months Maternal Fetal Medicine I
- One (1) month of Medical Genetics
- One (1) month Obstetrical Anesthesia
- One (1) month Neonatology
- Six (6) months Maternal Fetal Medicine II
- Six (6) months Research
- Three (3) months Elective

**GENERAL DESCRIPTION OF ROTATIONS**

**Maternal Fetal Medicine Year 1**

The emphasis in this six month block is on the acquisition of fetal ultrasound skills in the Fetal Assessment Unit. With the assistance of the nurse sonographers and the attending Maternal Fetal Medicine specialists, the resident begins with an introduction to the physics of diagnostic ultrasound, the functionality of the equipment, strategies to improve image quality, required elements of a fetal anatomical survey and practice in nuchal translucency measurements. Additional priorities include the development of expertise in ultrasound-guided amniocentesis, competency in the assessment of fetal well-being, management of abnormal tests and endovaginal ultrasound of early pregnancy, cervical length and placental localization. The resident is included in the assessment of fetal anomalies, the counselling of families in these cases and the management thereafter (including invasive tests, fetal echocardiography, consultations with other disciplines and follow-up).

The resident is actively involved in providing consultations and direct maternal care in a weekly high risk out-patient clinic attended by one of the Maternal Fetal Medicine sub-specialists with a particular interest in maternal medical complications of pregnancy. Ongoing continuity of care on the part of the resident, intrapartum and postpartum, is facilitated. Additional antepartum consultations of particular interest to the resident are
culled from two other high risk obstetrical clinics. The resident is also incorporated into the MFM call schedule with exposure to off-hours intrapartum and antepartum consultations from generalist obstetricians, family doctors and midwives.

The resident is an active teacher in the rotation, providing presentations at High Risk Rounds 1-2 times per month (mostly stimulated by recent literature, a recent unusual case or an ongoing obstetrical dilemma). During this rotation a topic is identified for further deeper inquiry that is usually summarized in a case report with literature review or forms the basis for a research project in the ensuing months.

**Medical Genetics**

This rotation builds on the exposure to Medical Genetics that occurs in the preceding Maternal Fetal Medicine rotation. Although the emphasis is on prenatal genetics (screening, counselling, diagnosis, management), the resident is also involved in out-patient clinics with pediatric and adult medical genetics consultations and metabolic disorders. In-patient consultations to the Medical Genetics service during this rotation are also part of the resident’s exposure. The resident is introduced to the cytogenetics laboratory and the molecular genetics laboratory as well. Included in this rotation is time allocated in the pathology department for examination of the placenta, fetus and newborn. The resident is supervised by the faculty in the department of Medical Genetics.

**Obstetrical Anaesthesia**

The rotation in Obstetrical Anaesthesia involves the resident in the assessment and planning of care in high-risk parturients. These patients include out-patients seen in the pre-admission clinic. Also, as this rotation is based on the high-risk Labour & Delivery Unit, all acutely ill antepartum and postpartum patients admitted during the rotation are identified for involvement by the resident. This includes patients whose care requires admission to an intensive care unit. The curriculum in this rotation includes maternal physiology, the maternal and fetal effects of maternal illness, the pharmacology and physiological consequences of common peripartum interventions and critical care of the pregnant patient. This rotation is under the direction of the Maternal Anaesthesia service.

**Neonatology**

During this rotation, the resident is directly involved in providing neonatal care in the Neonatal Intensive Care Unit, the Intermediate Care Unit and the resuscitation room on Labour & Delivery. Antepartum consultations to Neonatology also form part of the clinical content. Successful completion of the Neonatal Resuscitation Program is also required prior to or at the start of this rotation. Exposure to Neonatal transport and high risk newborn follow-up clinics is also facilitated. The resident is under the supervision of the attending Neonatology staff during this rotation.
**Maternal Fetal Medicine Year 2**

This 6 month block in Maternal Fetal Medicine consolidates the fetal ultrasound skills acquired in the first year. The emphasis is on establishing expertise in prenatal diagnosis with graduated independence in arriving at the diagnosis of fetal anomalies, undertaking appropriate investigations or treatments, counselling the family, coordinating multidisciplinary care and follow-up (including into the nursery or the pathology department). Advances in fetal echocardiography skills are also facilitated with the Pediatric Cardiology section. Additional independence is cultivated in the maternal consultations encountered in the out-patient and in-patient setting. Participation in more advanced procedures such as cordocentesis and fetal transfusion is expected in this rotation.

The resident is required to prepare teaching rounds once or twice a month and to be additionally involved in the training of more junior residents rotating through. Advancement of the resident's investigational project occurs during this rotation in anticipation of dedicated research time later in the year.

**Research Year 2**

Preparation for the content of this six-month block begins early in the first year. With the assistance of the Residency Program Research coordinator the groundwork for the resident's research project is laid out in advance including: a proposal, appropriate funding or facility, a supporting literature review and ethics research board approval. This allows the resident to successfully complete their project and a paper during this six month block. Research activities are supported by research curriculum throughout their training including a mandatory Biostatistics course.

**Electives**

Selection and organization of electives is undertaken by the resident in consultation with the Residency Program Director and with the approval of the Residency Committee. In the past resident electives have included: Fetal/Pediatric Echocardiography, Obstetrical Medicine, Perinatal/Placental Pathology, Adult Intensive Care and Maternal Fetal Medicine External electives. Residents are encouraged to explore elective opportunities at other Academic centres to broaden their exposure.

**Call**

During the clinical assessment period of the Maternal Fetal Medicine 1 rotation, the resident's core Maternal Fetal Medicine clinical and procedural skills are evaluated. Once the resident demonstrates appropriate clinical and procedural skills, he/she will be placed into the call schedule as a Maternal Fetal Medicine junior consultant. A designated Maternal Fetal Medicine staff-person will be available for supervision/assistance.
The resident will be responsible for call 1:4 weeks during their MFM1 and MFM2 rotations. Call is from home. Consultations during call originate from general obstetricians, midwives and family physicians practicing at the two teaching hospitals providing obstetrical care in the Winnipeg Region. Phone calls from physicians and practitioners outside of the city (including Northern Manitoba, North-western Ontario and Nunavut) for phone assistance or to arrange transfers to Winnipeg for care will be directed to the resident during their on call period.

In addition, the resident will be called for intrapartum/off hours care of designated obstetrical patients with high risk conditions that the resident has become involved with through the Out-patient clinics. This call will also be from home.

The resident will also be called regarding uncommon clinical obstetrical events (such as Cesarean hysterectomy and emergency cerclage).

During the Medical Genetics, Obstetrical Anaesthesia and Neonatology rotations the resident will be incorporated into the service’s call schedule at a frequency consistent with the PARIM contract terms.

During the research rotation, the resident will also be notified of uncommon obstetrical and perinatal clinical events that are occurring.

**Participation in Standing Committees**

Subspecialty residents are expected to participate in a variety of hospital and departmental committees. Each committee has a different mandate with differing requirements of committee members. Involvement in committee work fulfills part of the CanMEDS requirement for Collaborator, Manager, Health Advocate, and Professional.

At the beginning of each academic year, subspecialty residents are assigned to specific committees. The subspecialty resident is expected to attend and participate in all assigned committee meetings. In the event a subspecialty resident cannot attend a committee meeting, it is his/her obligation to notify the Chair of the committee and to find an alternate if needed.