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1. Mission and Vision

Mission

The program aims to train and graduate competent, safe, skilled and knowledgeable specialists. This is a six year program of structured training in Obstetrics and Gynecology. At its completion, the trainee is expected to be a competent specialist capable of functioning independently in Obstetrics and Gynecology comparable to International Standards.

Vision

To provide safe, skilled and competent specialists in the field of Obstetrics and Gynecology who will be leaders in providing quality health care to women all over Oman and also envision and implement National programs towards achieving excellence in women’s health issues.
2. General Objectives

**ACGME Competencies**
I. Patient Care (PC)
II. Medical knowledge (MK)
III. Practice based learning and improvement (PBLI)
IV. Interpersonal and communication skills (ICS)
V. Professionalism (P)
VI. Systems-based practice (SBP)

**I. Patient Care**
Residents must be able to provide appropriate, compassionate and effective care for treatment of various problems relating to obstetrics and gynecology and promote women’s health.

Residents must be able to:

A. Demonstrate caring and respectful behavior when interacting with patients and their families (PC,P,ICS)
B. Gather essential information about patients by performing a complete and accurate medical history and physical examination. (PC,ICS,MK)
C. Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence and clinical judgment. (PC,PBLI,MK)
D. Develop, negotiate and implement effective patient management plans. (PC,ICS,P,SBP)
E. Counsel and educate patients and their families. (PC,PBLI,ICS,P,MK)
F. Use information technology to support patient care decisions and patient education. (PC,PBLI,SBP)
G. Perform competently all medical and invasive procedures considered essential for generalist practice in the discipline of Obstetrics and Gynecology. (PC,MK)
H. Understands the differences between screening and diagnostic tests essential for generalist practice in Obstetrics and Gynecology. (PC,MK)

**II. Medical knowledge**
Residents must demonstrate knowledge of established, current and evolving knowledge in the field of obstetrics & gynecology and related sciences and apply this knowledge to patient care.

Residents must be able to:

A. Demonstrate an investigatory and analytic thinking approach to clinical situations. (MK,PBLI)
B. Demonstrate a sound understanding of the basic science background of women’s health and apply this knowledge to clinical problem solving, clinical decision making and critical thinking. (MK,PBLI,PC,SBP)

C. Demonstrate an understanding of the strengths and limitations of various research designs, and will during residency training, design and present the results of at least one prospective study which addresses an issue of relevance to the specialty. (MK,SBP,PBLI)

III. Practice Based Learning and Improvement (PBLI)

Residents must develop the ability to constantly self-evaluate their patient care with a view to improve their practice.

Residents must be able to:

A. Identify areas for personal and practice improvement and implement strategies to enhance knowledge, skills, attitudes and processes of care, as well as making a commitment to life-long learning. (MK,P,SBP,PBLI)

B. Analyze and evaluate personal practice experience and implement strategies to continually improve the quality of patient care. (PBLI, SBP,P,MK,PC)

C. Locate, appraise and assimilate evidence from scientific studies related to patients health problems (PBLI,MK,PC)

D. Obtain and use information about their population of patients (PBLI, SBP, PC)

E. Demonstrate receptiveness to instruction and feedback (PBLI, ICS,P)

F. Apply knowledge of study designs and statistical methods to the appraisal of clinical studies. (PBLI,MK,PC)

G. Use information technology to manage information, access online medical information, and support their education (PBLI,P,MK)

H. Facilitate the learning of students and other health care professionals (PBLI, ICS, SBP,MK)

IV. Interpersonal and Communication Skills (ICS)

Residents must demonstrate effective interpersonal and communication skills and achieve a high level of competence in communicating with patients and relatives. Residents must also develop effective oral and written communication skills with other members of the health care team.

Residents must be able to:

A. Sustain therapeutic and ethically sound relationships with patients, their relatives and colleagues. (ICS,P)

B. Provide effective and professional consultation to other physicians and health care professionals (ICS,P,SBP,MK,PBLI)
C. Elicit and provide information using effective listening, non-verbal, explanatory, questioning and writing skills. (ICS,P)  
D. Communicate effectively and appropriately with patients keeping cultural and socioeconomic background in view. (ICS, P,PC)  
E. Maintain comprehensive, timely and legible medical records (ICS,P,PC)  
F. Communicate effectively as a member or leader of a health care team or other professional group (ICS,SBP,P) 

V. Professionalism (P) 

Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to a diverse population. 

Residents must be able to:  
A. Demonstrate respect, compassion, integrity and responsiveness to the needs of patients and society that supersedes self-interest (P,ICS)  
B. Demonstrate accountability to patients, society and the profession – uncompromised honesty (P,ICS), punctuality and efficiency(P) good work ethics, positive attitude and high initiative levels (P)  
C. Demonstrate a commitment to excellence and ongoing professional development (P,PBLI)  
D. Demonstrate a commitment to ethical principles of clinical care (P,PC)  
E. Describe basic ethical concepts like autonomy, beneficence, justice and non-malfeasance (P,ICS)  
F. Describe the process of informed healthcare decision making including specific components of informed consent decisions (P,ICS,PC)  
G. Discuss surrogate decision making for incapacitated patients, who can act as proxy decision makers in healthcare choices (P,PC,ICS)  
H. Describe legal, ethical and emotional issues surrounding withholding and withdrawing medical therapies (P,MK,SBP,PC)  
I. Discuss appropriateness of using or limiting all available technology to sustain life and when it is appropriate to limit treatment (P,ICS,SBP,PC)  
J. Discuss ethical implications of commonly used technologies in Obstetrics & Gynecology (P,MK,SBP,PC)  
K. Analyze an ethical conflict and develop a ethically defensible and medically reasonable course of action (P,PC,MK,ICS)  
L. Discuss important issues regarding stress management, substance abuse and sleep deprivation (P,MK,ICS,PC)  
M. Maintain confidentiality of patient information and understand sources of loss of privacy in the health care system (P,SBP,ICS)  
N. Demonstrate sensitivity and responsiveness to culture, age, socioeconomic status, beliefs and disabilities of patients and colleagues (P,ICS)
VI. Systems Based Practice (SBP)

Residents must demonstrate an awareness and responsiveness to the larger context of the health care system and the ability to effectively call on system resources to provide optimal care.

Residents must be able to:
A. Understand how their patient care and professional practices affect other health care professionals, their health care organization and society and how these in turn affect them and their practice. (SBP,PC,P,ICS)
B. Practice cost-effective health care and resource allocation that does not compromise quality of care. (SBP,PC,P)
C. Advocate for quality patient care and assist patients in dealing with system complexities (SBP,ICS,P)
D. Acknowledge that patient safety is always the first concern of the physician, demonstrate ability to discuss errors in management and learn from errors to improve patient care, participate in Quality improvement activities and patient safety initiatives, participate in disclosure and discussion of adverse events with patients (SBP,ICS,P,PBLI,PC,MK)
E. Partner with health care managers and providers to assess and improve health care (SBP,ICS,P,PBLI,PC)
F. Describe a systematic plan for minimizing the risk of professional liability claims in clinical practice and medico-legal concepts regarding professional liability. (P,SBP,PC&ICS)
3. Admission Criteria

The applicant must:

1. Be a holder of bachelor's degree in Medicine & Surgery or equivalent from a University recognized by the OMSB.

2. Have completed a year of internship, preferably with a rotation in OB/GYN.

3. Be of good conduct and medically fit for specialty

4. Provide three letters of recommendations from three consultants with whom the applicant has worked with confirming her/his ability and capability of training.

5. Submit a letter of approval from the applicant's sponsor confirming permission to join the OMSB specialty training program on full time basis for the entire period of training.

6. Pass the entrance examination set by OMSB.

7. Pass the entry interview.

8. The education committee may add other conditions or oral / written examinations or tests as approved by OMSB.

9. The trainees are selected as per the rules and regulations of OMSB.
4. Administration and Governance

Residents are expected to be in compliance with departmental and hospital administrative requirements including, timely documentation of clinical care, statistics recording, duty hours, and completion of evaluations of rotations, recertification requirements and attendance at required didactic lectures.

4.1 Education Committee Members

CHAIRMAN
DR. LAMYA AL KHARUSI

PROGRAM DIRECTOR
DR. NIHAL AL RIYAMI

ASSOCIATE PROGRAM DIRECTORS
DR. RAHMA AL GHABSHI
DR. ANITA ZUTSHI
DR. LOVINA MACHADO
DR. SULTANA ALI KHAN

MEMBERS
DR. WADHA AL GHAFRI
DR. TAMIMA AL DUGHAISHI
DR. MAHA AL KHADURI
DR. MARYAM AL SHUKRI
DR. ABDULRAHMAN AL FARSI
DR. THURAYA AL RAWAHI
DR. DEVYANI NARAYAN
DR. A.R. VIJAYALAKSHMY
DR. MINI ROY
### 4.2 Sub-committee Members

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<td>Dr. Tamima Al Dughaishi</td>
<td>Dr. Devyani Narayan</td>
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<td><strong>Members</strong></td>
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<tr>
<td>Dr. Abdul Rahman Al Farsi</td>
<td>Dr. Anita Zutshi</td>
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<td>Dr. A.R. Vijayalakhsmy</td>
<td>Dr. Maha Al Khaduri</td>
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<td>Dr. Lovina Machado</td>
<td>Dr. Rahma Al Ghabshi</td>
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<td>Dr. Anita Zutshi</td>
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<td>Dr. Wadha Al Ghafrri</td>
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<td>Dr. Maryam Al Shukri</td>
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<td>Dr. Mini Roy</td>
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<td>Dr. Rahma Al Ghabshi</td>
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<td>Dr. Tamima Al Dughaishi</td>
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<td>Dr. Lamya Al Kharusi</td>
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<td><strong>Members</strong></td>
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<td>Dr. Rahma Al Ghabshi</td>
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<td>Dr. Sultana Khan</td>
<td>Dr. Wadha Al Ghafrri</td>
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<td>Dr. Lovina Machado</td>
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<th>Career Advisor</th>
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<td>Dr. Thuraya Al Rawahi</td>
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<td>Dr. Devyani Narayan</td>
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<td>Dr. Wadha Al Ghafrri</td>
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### 4.3 Participating Training Centers

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<tr>
<td>Nizwa Hospital</td>
<td>Khoula Hospital</td>
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<td>Sohar Hospital</td>
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5. Curriculum Components

5.1 Duration of the Program
This is a six year program of structured training in Obstetrics & Gynecology. The program includes one year of compulsory training at R4 or R5 level at OMSB approved training centers abroad.

5.2 Outline of rotations

5.2.1 Year One and Two

Core Program
This includes the first 2 years of residency training where residents will be introduced to general Obstetrics and Gynecology along with training at allied specialty rotations. Each block comprises 4 weeks.

They will undergo rotations in different departments as follows:

- General Obstetrics - 10 blocks
- General Gynecology - 8 blocks
- Neonatal Intensive Care Unit (NICU) - 1 block
- Intensive Care Unit (ICU) - 1 block
- Basic Obstetric Ultrasound - 1 block
- Birth Spacing /Family Planning Clinic - 1 block
- Emergency Medicine - 1 block
- Research – R2 - 1 block
- Annual Leave - 2 blocks

5.2.2 Year Three

They will undergo rotations in different departments as follows:

- Gynecologic Pathology - 1 block
- Research - 1 block
- Basic Obstetric Ultrasound - 1 block
- Genetics - 1 block
- General Obstetrics - 5 blocks
- General Gynecology - 3 blocks
- Annual Leave - 1 block

5.2.3 Year Four – Rotations abroad

- Maternal Fetal Medicine - 3 blocks
- Reproductive Medicine /Infertility - 3 blocks
- Gynecological Oncology - 3 blocks
- Urogynecology - 3 blocks
- Annual Leave - 1 block
5.2.4 Year Five and Six (Senior Residency)

In these senior years, the resident will assume responsibility, under supervision, approximating and consolidating specialist skills. They will provide care for out-patients and in-patients with complex problems and will have administrative and educational responsibilities for a significant portion of the year.

This year includes a minimum of 7 blocks in general obstetrics and gynecology.

- Obstetrics Senior Rotation - 4 blocks
- Gynecology Senior Rotation - 4 blocks
- Maternal Fetal Medicine - 3 blocks
- Reproductive Medicine /Infertility - 3 blocks
- Gynecological Oncology - 3 blocks
- Urogynecology - 3 blocks
- Research - 1 Block
- Selective Rotations by Residents - 3 blocks
- Annual Leave - 2 blocks

Three blocks of selective rotations in different specialty teams of Obstetrics & Gynecology selected by the residents

1. General Obstetrics
2. General Gynecology
3. Maternal Fetal Medicine
4. Reproductive Medicine
5. Gynecologic Endoscopy
6. Gynecological Oncology
7. Urogynecology

This period of training will be in an area to be chosen by the resident in consultation with her/his program director.
### 5.2.5 Obstetrics & Gynecology Block Diagram Year 1-6

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<tr>
<td>1</td>
<td></td>
<td>General Obstetrics (DS, PNW, ANW, Assessment, Admission)</td>
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<td>General Gynecology (Gyn Ward, Clinic, OT)</td>
<td>Neonatal Intensive Care Unit</td>
<td>Basic Obstetric Ultrasound</td>
<td>Emergency Medicine</td>
<td>Annual Leave</td>
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<td>General Obstetrics (DS, PNW, ANW, Assessment, Admission)</td>
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<td>General Gynecology (Gyn Ward, Clinic, OT)</td>
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<td>Intensive Care Unit</td>
<td>Birth Spacing/Family Planning</td>
<td>Research</td>
<td>Annual Leave</td>
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<td>3</td>
<td>Gynecologic Pathology</td>
<td>Research</td>
<td>Basic Obstetric Ultrasound</td>
<td>Genetics</td>
<td>General Obstetrics (DS, PNW, ANW, Assessment, Admission)</td>
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<td>General Gynecology (Gyn Ward, Clinic, OT)</td>
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<td>ROTATIONS ABROAD</td>
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<td>Obstetrics Senior Rotation</td>
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<td>Senior Gynecology</td>
<td>Research</td>
<td>Selective Rotations by Residents</td>
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<td>Annual Leave</td>
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<td>Obstetrics Senior Rotation</td>
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<td>Senior Gynecology</td>
<td>Research</td>
<td>Selective Rotations by Residents</td>
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<td>Annual Leave</td>
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**Note:** Annual Leave can be taken all at once (30 days) or 2 weeks together (end of 1 block and start of the next block, 75% of the block must be attended to receive full credit for the block) throughout the academic year.
5.3 Objectives per Rotation

5.3.1 General Obstetrics Rotation

Duration:  
R1 – 5 Blocks  
R2 – 5 Blocks  
R3 – 4 Blocks

Location:  
Sultan Qaboos University Hospital / Khoula Hospital /  
Royal Hospital / Nizwa hospital

Overview:  
Rotation provides the resident opportunity to work in delivery suite,  
antenatal, post natal wards, outpatient clinics and emergency room.  
This constitutes a total team experience with emphasis on patient care  
involving various disciplines of which labor and delivery ward forms the  
major part. Resident reports to the rotation supervisor who discusses  
the objectives of rotation and assigns the responsibilities. Admitting  
patients after appropriate history taking examination, assessment of  
progress in labor, assessment prior to induction of labor conducting  
normal deliveries, suturing episiotomies, performing instrumental  
deliveries under supervision and assisting for caesarean sections. All  
residents should attend morning meetings, actively participating in case  
discussions and on-call duties.

Supervision:  
The senior doctor in service is responsible for assigning duties and  
manages clinical decisions. The ultimate responsibility is that of the  
Senior doctor assigned to the service that is immediately available and  
provides 24 hour coverage.

I. Patient Care  
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 will develop measurable competencies  
in the following areas:

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>ACGME Competency</th>
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<tr>
<td>Evaluate and manage pregnant patients</td>
<td>MK, PC, ICS, P</td>
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<tr>
<td>Recognize early labor complications</td>
<td>MK, PC, ICS</td>
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<tr>
<td>Manage normal labor</td>
<td>MK, PC</td>
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<tr>
<td>Perform vaginal deliveries</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Performing instrumental deliveries under supervision</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Assist in Cesarean deliveries</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Repair episiotomies and vaginal lacerations</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Manage postpartum care</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Perform basic obstetric ultrasound</td>
<td>MK, PC</td>
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</table>
II. Practice-based Learning and Improvement
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 life-long learning.

Residents are expected to develop skills and habits to be able to meet the following goals:

- Identify strengths, deficiencies, and limits in one’s knowledge and expertise;
- Set learning and improvement goals;
- Identify and perform appropriate learning activities

To that end, residents will be provided the following educational opportunities:

**Clinical work/responsibilities**
- Manage delivery triage and delivery suite
- Manage antenatal and postnatal patients in the wards
- Attend normal and high risk OB clinics
- Attend emergency room calls as per training center requirements
- Attend teaching rounds and present patient cases
- Research evidence-based medicine topics
- Teach medical students

III. Medical Knowledge
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. Resident must be able to recognize the anatomic and physiological changes of pregnancy. They must be able to recognize those factors in history and physical examination that indicate possible medical or obstetric complications. They must understand how to apply the above information in clinical management. Resident should be able to appropriately refer patients to subspecialty trained physicians.

To achieve this objective, medical knowledge is necessary in the following areas:

1. **Basic Science /Mechanism of Disease**

   **A. Genetics**
   - Describe the basic structure and replication of DNA
   - Describe the process of mitosis and meiosis
   - Describe the clinical significance of Karyotypic abnormalities
   - Describe the clinical significance of heritable diseases
B. Physiology
- Describe the major physiological changes during pregnancy
- Learn to differentiate between physiologic and pathologic changes during pregnancy
- Interpret common diagnostic tests during pregnancy

C. Embryology and developmental biology
- Describe the process of gametogenesis, fertilization and embryonic development of pregnancy

D. Anatomy
- Describe the anatomy of the pelvis and vulva
- Describe the anatomic changes in the mother caused by physiological adaptation to pregnancy
- Describe the anatomic changes during intra-partum and postpartum period

E. Pharmacology
The resident should be able to describe:
- the role of nutritional supplementation in pregnancy
- the impact of pregnancy on serum and tissue drug concentration and drug efficacy
- the factors that influence the transplacental passage of drugs
- the possible side effects and teratogenic effects of drugs prescribed during pregnancy
- the effects of non-prescription drugs such as alcohol, heroin, cocaine and tobacco

F. Pathology and Neoplasia
The resident should be able to:
- Describe the symptoms and physical signs of neoplasia during pregnancy
- Counsel a patient about the treatment options, their impact on pregnancy and timing of delivery in consultation with gynecologic oncologist.

G. Microbiology and Immunology
The resident should be able to describe:
- the principal features of the host immunological response
- maternal immune response in pregnancy
- development of fetal immunological response
- the association between genital tract infection and adverse perinatal outcomes, such as: preterm labor, preterm premature rupture of membranes, neonatal infection, maternal infection
2. Antepartum Care

A. Preconception Care
- Perform a thorough history, assessing historical and ongoing risks that may affect future pregnancy (PC,ICS)
- Counsel a patient regarding the impact of pregnancy on maternal medical conditions and vice versa (PC,MK,ICS,P)
- Counsel a patient regarding appropriate lifestyle modifications conducive to a favorable pregnancy outcome (PC,MK,ICS,P)
- Counsel a patient regarding appropriate preconception testing (SBP)
- Counsel a patient regarding pregnancy associated risks and conditions such as: Advanced age, hypertension, diabetes, genetic disorder, prior aneuploid or anomalous fetus/new born (MK,ICS,PC,P)

B. Prenatal Care
- Perform a comprehensive history and physical examination (ICS)
- Order and interpret routine laboratory tests and those required due to high risk factors (PC,SBP)
- Counsel patients about lifestyle modifications that improve pregnancy outcome (ICS,P)
- Counsel patients about warning signs of adverse pregnancy events (ICS,P)
- Schedule and perform appropriate antepartum follow up visits for routine and high risk obstetric care (PC,PBLI,SBP)
- Counsel patients about appropriate immunizations during pregnancy (ICS,SBP)
- Counsel patient regarding options of analgesia in labor (ICS, MK, SBP)
- Assess and counsel the patient regarding timing and mode of delivery especially in high risk pregnancy (ICS, MK, SBP)
- Counsel patients about the benefits of breastfeeding (ICS, SBP)

C. Antepartum Fetal Monitoring
- Describe the indications, contraindications, advantages, disadvantages and interpretation of antepartum diagnostic tests such as: Non-stress test, contraction stress test, biophysical profile, vibroacoustic stimulation, Doppler velocimetry
- Integrate the above tests into clinical management algorithms (MK,PC,SBP)

D. Medical Disorders in pregnancy
- Describe the risk factors, etiologies, symptoms, clinical manifestations, diagnosis, management and complications of various medical disorders in pregnancy like diabetes,
hypertension, neurological, hematological, immunological, renal and gastrointestinal diseases. (MK, PC, SBP, ICS)

3. Obstetric Complications

A. Second Trimester pregnancy loss
   - Describe the risk factors, etiologies, symptoms, clinical manifestations, diagnosis and management of a second trimester pregnancy loss. (MK, PC)
   - Counsel patients with second trimester pregnancy loss. (ICS,P)

B. Preterm Labor
   - Describe the risk factors, etiologies, symptoms, clinical manifestations, diagnosis, management and complications of preterm labor
   - Counsel patients about recurrence risk and preventive measures for preterm delivery (ICS,P)

C. Bleeding in Late Pregnancy
   - Describe the risk factors, etiologies, symptoms, clinical manifestations, diagnosis, management and complications of bleeding in late pregnancy. (MK)
   - Counsel patients about the recurrence risk for placenta previa and abruptio placenta. (MK,ICS,P)

Suggested Reading:
- *Williams Obstetrics* (Latest Edition)
- Relevant international recommendations/guidelines from RCOG ([www.rcog.org.uk](http://www.rcog.org.uk)), SOGC ([www.sogc.org](http://www.sogc.org)), ACOG ([www.acog.com](http://www.acog.com))

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

Residents are expected to:
- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;
- Work effectively as a member or leader of a health care team or other professional group; and,
- Maintain comprehensive, timely, and legible medical records.

V. Professionalism
- Trainees will learn to practice in a collegial environment with their fellow residents, house staff from the department and staff in other specialties as well as with nurses and paramedical personnel.
Residents will learn how to take care of patients and families in a compassionate and humanistic way that demonstrates a commitment to their professional responsibility and an adherence to ethical principles. Residents are expected to demonstrate: compassion, integrity, and respect for others; a responsiveness to patient needs that supersedes self-interest; a respect for patient privacy and autonomy; accountability to patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disability, and sexual orientation.

VI. Systems-based Practice
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 work effectively in various health care delivery settings and systems relevant to their clinical specialty.

Evaluations:
- Resident evaluation by MINI CEX, 360 degree
- End of rotation evaluation of residents
- Resident evaluation of rotation
- Resident evaluation of faculty
- Procedural skills evaluation (DOPS)
5.3.2 General Gynecology

**Duration:**
- R1 – 4 Blocks
- R2 – 4 Blocks
- R3 – 3 Blocks

**Location:** Sultan Qaboos University Hospital / Khoula Hospital / Royal Hospital

**Overview:**
General Gynecology rotation will be for 8 blocks where the resident has an opportunity to learn basic gynecology. The service consists of patient care in the gynecology clinic, ward and operation theatre. The resident learns the basics of taking a detailed gynecological history, performs gynecological examinations, performs or orders relevant investigations and plan management. They also learn pre-operative evaluation, assist for gynecological procedures and learn post-operative management.

The resident will attend the regular didactic lectures as per schedule. The residents will participate in the call duty schedule of the hospital.

**Supervision**
Residents will be supervised by senior doctors at each site.

I. **Patient Care**
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 will develop measurable competencies in the following areas:

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>ACGME Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtain complete history and physical examination</td>
<td>PC, MK, IP&amp;C, P</td>
</tr>
<tr>
<td>Perform transvaginal pelvic ultrasounds</td>
<td>PC, MK</td>
</tr>
<tr>
<td>Perform PAP smear and pelvic examination</td>
<td>PC, MK, IP&amp;C</td>
</tr>
<tr>
<td>Perform breast examination</td>
<td>PC, MK</td>
</tr>
<tr>
<td>Understand pathophysiology of common gynecological disorders</td>
<td>PC, MK, PBL &amp; I</td>
</tr>
<tr>
<td>Perform minor gynecological surgeries</td>
<td>PC, MK</td>
</tr>
<tr>
<td>Assist for major gynecological surgical procedures</td>
<td>PC, MK</td>
</tr>
<tr>
<td>Assist in the management of postoperative patients</td>
<td>PC, MK, IP&amp;C, P</td>
</tr>
</tbody>
</table>

II. **Practice-based Learning and Improvement**
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 life-long learning.
Residents are expected to develop skills and habits to be able to meet the following goals:

- Identify strengths, deficiencies, and limits in one’s knowledge and expertise;
- Set learning and improvement goals;
- Identify and perform appropriate learning activities;
- Incorporate formative evaluation feedback into daily practice;
- Use information technology to optimize learning; and,
- Participate in the education of patients, families, students, residents and other health Professionals.

Residents will be provided the following educational opportunities:

**Clinical work/responsibilities:**
- Attend gynecology clinics
- Attend gynecology teaching rounds
- Preoperative and postoperative assessment and evaluate surgical patients
- Perform minor gynecological surgeries
- Research evidence-based medicine topics

**Other educational opportunities**
- Attend:
  - grand rounds and resident workshops and conferences
  - simulation labs as per schedule
  - teaching sessions and journal clubs
  - daily admission meetings
- Attend and participate in histopathology meetings
- Participate in M&M meetings
- Present:
  - evidence-based medicine topics at teaching rounds
  - evidence-based medicine topics at the departmental CME activities

**III. Medical Knowledge**

The practice of Gynecology includes both surgical and non-surgical treatment of disorders of the female reproductive tract. In acquiring skills and knowledge in the general discipline of gynecology, the resident should assimilate diagnostic and therapeutic principles underlying a broader spectrum of medical and surgical disorders. Resident should have knowledge about the following conditions:

- Embryology, developmental biology and genetics
- Anatomy and physiology of the female reproductive system
- Disorders of the urogenital tract and breast
  - Abnormal and dysfunctional uterine bleeding
  - Vaginal and vulvar infections
  - Vulvar dystrophies, dermatoses and vulvar pain syndromes
  - Sexually transmitted diseases
  - Pelvic inflammatory disease
Pelvic masses
- Chronic pelvic pain
- Endometriosis
- Benign disorders of the breast
- First trimester pregnancy loss
- Ectopic pregnancy
  - Pre-operative, intra-operative and post-operative care
  - Critical care
    - Toxic shock syndrome
    - Acute blood loss

Suggested Reading:
- Berek & Novak's Gynecology, by Jonathan S Berek (Editor)
  Lippincott Williams & Wilkins; (Latest Edition)
  Edmonds, Blackwell Publishing, Edmonds, Blackwell Publishing

Recommended Optional Reading:
- Progress in Obstetrics & Gynecology, Studd Churchill Livinstone (latest 3 volumes)
- Recent advances in Obstetrics & Gynaecology, Bonner- RSM Press (latest 3 volumes)
- Gynecology -Shaw, Stanton & Soutten, Churchill Livingstone
- Shaw’s Textbook of Operative Gynaecology (6th edition) CN Hudson and ME Setchell, B.I. Churchill Livingstone

IV. Interpersonal Skills & Communication
Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. Residents are expected to:
- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;
- Work effectively as a member or leader of a health care team or other professional group; and,
- Maintain comprehensive, timely, and legible medical records

V. Professionalism
- Trainees will learn to practice in a collegial environment with their fellow residents, house staff from other services, faculty and
consultants in other specialties as well as with nurses and paramedical personnel.

- Residents will learn how to take care of patients and families in a compassionate and humanistic way that demonstrates a commitment to their professional responsibility and an adherence to ethical principles.
- Residents are expected to demonstrate: compassion, integrity, and respect for others; a responsiveness to patient needs that supersedes self-interest; a respect for patient privacy and autonomy; accountability to patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disability, and sexual orientation.

VI. Systems-based Practice
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 work in interprofessional teams to enhance patient safety and improve patient care quality.

Evaluations:
- Faculty evaluation of resident (MINI CEX, 360)
- Resident evaluation of rotation
- Resident evaluation of faculty
- Evaluation of Procedural Skills
5.3.3 NICU (Neonatal Intensive Care Unit) Rotation

Duration: R1 – 1 Block

Location: Sultan Qaboos University Hospital / Khoula Hospital / Royal Hospital

Overview: This rotation is aimed at providing the resident opportunity to be competent in neonatal resuscitation. Resident gains confidence in examination of new born baby and recognize neonatal abnormalities including congenital anomalies.

Supervision: Senior doctor on duty will be responsible for training the resident during working hours and on call duties.

I. Patient Care
Resident must be able to recognize neonatal conditions which require specific treatment and inform the senior neonatologist at appropriate time. Residents will develop measurable competencies in the following areas:

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>ACGME Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Perform an immediate assessment of the newborn and determine if resuscitative measures are indicated</td>
<td>MK, PC</td>
</tr>
<tr>
<td>▪ Resuscitate a depressed neonate</td>
<td>MK, PC</td>
</tr>
<tr>
<td>o Properly position the baby in the radiant warmer</td>
<td></td>
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<tr>
<td>o Suction the mouth and nose</td>
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<tr>
<td>o Provide tactile stimulation</td>
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<tr>
<td>o Administer positive pressure ventilation with bag and mask</td>
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<tr>
<td>o Administer chest compressions</td>
<td></td>
</tr>
<tr>
<td>o Insert endotracheal tube</td>
<td></td>
</tr>
<tr>
<td>▪ Assign Apgar Scores</td>
<td>PC, MK</td>
</tr>
<tr>
<td>▪ Describe the indications for cord blood analysis and interpret test results</td>
<td>PC, MK</td>
</tr>
<tr>
<td>▪ Obtain cord blood for the following purposes:</td>
<td>PC, MK</td>
</tr>
<tr>
<td>o Blood gas analysis</td>
<td></td>
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<tr>
<td>o Determination of fetal blood type</td>
<td></td>
</tr>
<tr>
<td>o Cord blood storage</td>
<td></td>
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<tr>
<td>o Determination of bilirubin levels, hematocrit, hemoglobin, direct coombs and reticulocyte count</td>
<td></td>
</tr>
<tr>
<td>▪ Identify signs of respiratory distress syndrome</td>
<td>MK, PC</td>
</tr>
<tr>
<td>▪ Identify signs of hypoglycemia and institute treatment</td>
<td>MK, PC</td>
</tr>
<tr>
<td>▪ Investigate and provide initial</td>
<td></td>
</tr>
</tbody>
</table>
treatment of neonatal jaundice  MK, PC, ICS

▪ Umbilical vein catheterization  MK, PC
▪ Identify signs of Hypovolemia and initiate appropriate volume replacement  MK, PC
▪ Recognize body temperature disturbances and institute appropriate temperature control measures  MK, PC
▪ Identify acid base disturbances and initiate appropriate management  MK, PC
▪ Recognize the indications for administration of topical antibiotics to prevent neonatal ophthalmic infection  MK, PC

II. Practice –based Learning and Improvement
Residents must demonstrate the ability to investigate and evaluate their care of new born, to appraise and assimilate scientific evidence and to continuously improve neonatal care based on constant self-evaluation and life-long learning.

Residents are expected to develop skills and habits to be able to meet the following goals:
▪ Identify strengths, deficiencies, and limits in one’s knowledge and expertise;
▪ Set learning and improvement goals;
▪ Identify and perform appropriate learning activities

In order to achieve the rotation objectives residents will be provided the following educational opportunities:

Clinical work /responsibilities
▪ Attend:
  o morning meetings
  o teaching rounds and present cases
  o Neonatal resuscitation course
  o perinatal mortality/morbidity meeting
  o multi-disciplinary meetings for counseling and management planning of couple having anomalous fetus including site and mode of delivery and whether fetal monitoring in labor is mandatory or not and the anticipated outcome.
▪ Research evidence –based medicine topics

III. Medical knowledge
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 should have sound knowledge of the various conditions of the following:

- Physiological changes in the newborn at birth
- Risk factors of perinatal asphyxia
- Detection and management of meconium aspiration syndrome
- Detection and management of hypothermia, hypoglycemia, hyperbilirubinemia and other metabolic disorders
- Detection and management of anemia and polycythemia
- Identify early signs of sepsis and management
- Importance of head and body cooling in management of perinatal asphyxia
- Identification of transient tachypnea of the newborn and respiratory distress syndrome
- Diagnosis of congenital diaphragmatic hernia
- Diagnosis of organic heart disease
- Complications of prematurity
- Growth restricted infant
- Importance of breast feeding

References and reading materials for the rotation:

To achieve this end resident should read the following during the rotation.

- Neonatology – Management on call problems, 6th edition 2010
  Author – Tricia Lacy Gomella (Lange publication)
- Williams Obstetrics 24th Edition

IV. Interpersonal Skills & Communication

Residents must demonstrate interpersonal and communication skills that result in effective exchange of information and collaboration with the families of neonates, and health professionals.

Residents are expected to:

- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
- Work effectively as a member or leader of a health care team or other professional group
- Maintain comprehensive, timely, and legible medical records.

V. Professionalism

- Trainees will learn to practice in a collegial environment with their fellow residents, house staff from the department and staff in other specialties as well as with nurses and paramedical personnel.

- Residents will learn how to take care of patients and families in a compassionate and humanistic way that demonstrates a commitment to their professional responsibility and an adherence
to ethical principles. Residents are expected to demonstrate: compassion, integrity, and respect for others; a responsiveness to patient needs that supersedes self-interest; a respect for patient privacy and autonomy; accountability to patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disability, and sexual orientation.

VI. Systems-based Practice
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 work effectively in various health care delivery settings and systems relevant to their clinical specialty.

Evaluations:
- Faculty evaluation of resident (MINI CEX, 360)
- Resident evaluation of rotation
- Resident evaluation of faculty
- Evaluation of procedural skills
5.3.4 Basic Obstetric Ultrasound Rotation

**Duration:** R1, R2 and R3 – 1 Block

**Location:** Sultan Qaboos University Hospital/ Khoula Hospital/ Royal Hospital

**Overview:**
During this rotation, the resident utilizes the opportunity to learn the basics of Ultrasound including the technical aspects of the machine and improvement in the quality of image. Resident will learn the use of ultrasound in assessment of early pregnancy complications. Resident also will be able to understand normal fetal anatomy, placental localization, assessment of amniotic fluid volume and Doppler studies. The residents are expected to do on call duties as per schedule.

**Supervision:**
A senior Obstetrician, Fetal Medicine Consultant or designated Obstetric Ultrasound technicians (depending on the setup) is responsible for training the resident during working hours. During the on call duties residents will be supervised by the on-call team.

I. Patient Care
Resident must be able to do ultrasound examination with care and compassion. Residents will develop measurable competencies in the following areas:

**Learning Objectives**

- Acquire basic ultrasound technical knowledge, including practical physics and handling.  
  - ACGME Competency: MK, SBP
- Develop a standardized systematic approach to Obstetrical ultrasound  
  - ACGME Competency: MK, PBLI, PC
- Assessment of normal intrauterine pregnancy  
  - ACGME Competency: MK, PC
- Assessment of early pregnancy complications including miscarriage, ectopic pregnancy and molar pregnancy  
  - ACGME Competency: MK, PC
- Demonstrate understanding of:  
  a. Normal fetal anatomy  
  b. Multi-parameter dating  
  c. Quality control mechanisms within the examination  
  d. Components of Obstetric Ultrasound depending on the indication  
  e. The use of Transvaginal ultrasound in cervical assessment  
  f. Ultrasound in conjunction with antepartum testing  
  g. The role of use of ultrasound in amniocentesis  
  h. The role of ultrasound in diagnosing placental abnormalities  
    o The role of use of ultrasound in the delivery suite  
    o Refine the residents’ own ultrasound skills by performing  
- Ultrasound under supervision starting in R1 level and continuing to R6 level  
  - ACGME Competency: MK, PC, ICS, SBP
• Recognize ultrasound findings and clinical significance of common fetal anomalies MK, PC

II. Practice–based Learning and Improvement
Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve the ultrasound skills based on constant self-evaluation and life-long learning.

Residents are expected to develop skills and habits to be able to meet the following goals:

• Identify strengths, deficiencies, and limits in one’s knowledge and expertise;
• Set learning and improvement goals;
• Identify and perform appropriate learning activities

To achieve the rotation objectives, residents will be provided the following educational opportunities:

Clinical work/responsibilities
• Regular attendance at designated Clinics
• Follow up of patients with fetal anomalies and confirm the anomaly postpartum
• Attend counseling sessions with fetal medicine consultant and the couple in those with anomalies.
• Presenting selected fetal anomalies during multi-disciplinary meetings and designated fetal rounds.

III. Medical knowledge
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 should have sound knowledge of the following:

• Basics of Ultrasound including Physics, settings on the machine to get optimum image resolution (MK)
• Physics of Doppler ultrasound and safety concerns in early pregnancy (MK)
• Use of Transvaginal Ultrasound in early pregnancy, Cervical assessment and Placental localization (MK)
• Knowledge of fetal anomalies and systematic approach in performing obstetric ultrasound (MK)
• Use of ultrasound in evaluation of adnexal masses and fibroid uterus. (MK,PC)
• Use of Ultrasound in evaluating pain complicating pregnancy (MK,PC)
- Role of Ultrasound in monitoring high risk pregnancy (MK, PC, ICS)
- The role of ultrasound in performing external cephalic version (MK, PC)
- Knowledge of implications of fetal anomalies and counseling (MK, PC, ICS, P)
- The role of ultrasound in diagnosing placenta abnormalities (MK)

Suggested reading:
- Ultrasound in Obstetrics and Gynecology. Peter W. Callen (Latest Edition)
- www.isuog.org
- The fetus.net (Sonoworld.com/the Fetus)

IV. Interpersonal Skills & Communication
Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with the families of patients, and health professionals. Residents are expected to:
- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;
- Work effectively as a member or leader of a health care team or other professional group; and,
- Maintain comprehensive, timely, and legible medical records.

V. Professionalism
- Trainees will learn to practice in a collegial environment with their fellow residents, house staff from the department and staff in other specialties as well as with nurses and paramedical personnel.
- Residents will learn how to take care of patients and families in a compassionate and humanistic way that demonstrates a commitment to their professional responsibility and an adherence to ethical principles. Residents are expected to demonstrate: compassion, integrity, and respect for others; a responsiveness to patient needs that supersedes self-interest; a respect for patient privacy and autonomy; accountability to patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disability, and sexual orientation.

VI. Systems-based Practice
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 work effectively in
various health care delivery settings and systems relevant to their clinical specialty.

**Evaluations:**
- Faculty evaluation of resident (MINI CEX, 360)
- Resident evaluation of rotation
- Resident evaluation of faculty
- Evaluation of Procedural Skills
5.3.5 Intensive Care Unit (ICU) Rotation

**Duration:** R2 - 1 Block

**Location:** Sultan Qaboos University Hospital/ Khoula Hospital/ Royal Hospital

**Overview:**
ICU rotation will be for 1 block in Junior Year. The resident must follow the assigned schedule of ICU. The resident will attend the regular didactic lectures as per schedule. The resident will be able to recognize and understand the management of critically ill patients on assisted ventilation, learn the management of fluid and electrolyte imbalance and principles of invasive monitoring. They will understand the principles of cardiopulmonary resuscitation, care of intubated patients and indications for different imaging modalities.

**Supervision**
Residents will be supervised by the Anaesthesia / Internal Medicine Program Director or his designee or faculty member on duty in the ICU.

I. Patient Care
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 will develop measurable competencies in the following areas:

**Learning Objectives**

<table>
<thead>
<tr>
<th><strong>ACGME Competency</strong></th>
<th><strong>Learning Objectives</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>PC, MK</td>
<td>Physiology of cardiac function e.g. preload, afterload, myocardial contractility</td>
</tr>
<tr>
<td>PC, MK</td>
<td>Oxygen delivery and consumption</td>
</tr>
<tr>
<td>PC, MK</td>
<td>Interactions of the cardiorespiratory system</td>
</tr>
<tr>
<td>PC, MK</td>
<td>Pathophysiology and hemodynamic pattern of hemorrhagic, septic, neurogenic, hypovolemic and cardiogenic shock</td>
</tr>
<tr>
<td>PC, MK</td>
<td>Basic mechanisms of the inflammatory response</td>
</tr>
<tr>
<td>PC, MK</td>
<td>Understand the various manipulation of volume and drugs that alter cardiac performance; recognition of arrhythmias and appropriate treatment</td>
</tr>
<tr>
<td>PC, MK</td>
<td>Familiarity and indications and uses of vasoactive medications</td>
</tr>
<tr>
<td>PC, MK</td>
<td>Respiratory compromise, intubations, weaning and extubation criteria</td>
</tr>
<tr>
<td>PC, MK</td>
<td>Indications for nutritional support and methods of providing this support</td>
</tr>
<tr>
<td>PC, MK, MK</td>
<td>Prophylactic measures used in the ICU (i.e. Stress ulcer prophylaxis, DVT prophylaxis)</td>
</tr>
<tr>
<td>PC, MK</td>
<td>Appreciation of surgical infections and appropriate</td>
</tr>
</tbody>
</table>
selection of antibiotics PC, MK
- Psychosocial needs of ICU patients and their families PC, MK, ICS, P
- Understand ethical concerns in the ICU including end of life decision making PC, MK, ICS, P
- Concept of multidisciplinary teamwork in the ICU PC, MK
- Management principles relevant to burn injury and trauma patients PC, MK

II. Practice-based Learning and Improvement
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 life-long learning.

Residents are expected to develop skills and habits to be able to meet the following goals:
- Identify strengths, deficiencies, and limits in one’s knowledge and expertise;
- Set learning and improvement goals;
- Identify and perform appropriate learning activities;
- Incorporate formative evaluation feedback into daily practice;
- Use information technology to optimize learning; and,
- Participate in the education of patients, families, students, residents and other health professionals

The residents will be provided the following educational opportunities:

Clinical work/responsibilities:
- CVP insertion
- Arterial line insertion
- Pulmonary artery catheterisation and waveform interpretation
- Intubation
- Properly utilise various modalities to improve respiratory function (i.e. bronchodilators, mucolytics, diuretics)
- Appropriately prescribe analgesics and sedatives
- Tube thoracostomy
- Calculated requirements and evaluate nutritional therapy
- Placement of nasoenteral feeding tubes
- Admit patients to the ICU and review orders to ensure appropriateness
- Take active role in therapeutic interventions by independently changing fluid orders, ventilator settings, pharmalogic support drugs, etc
- Interpret lab results properly
- Research evidence-based medicine topics

Other educational opportunities
- Attend:
  - resident workshops and conferences
  - simulation labs as per schedule
- teaching sessions and journal clubs
- daily admission meetings
- Present evidence-based medicine topics at the departmental CPD activities
- Participate in M&M meetings

III. Medical Knowledge
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. Medical knowledge objectives have been covered with patient care objectives (refer to Section I above).

Suggested Reading:
- The ICU Book (Paul Marino 4th Edition)
- Oxford handbook of critical care (3rd edition)
- Critical Care Handbook of the Massachusetts General Hospital (fifth edition)

IV. Interpersonal Skills & Communication
Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. Residents are expected to:
- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds.
- Work effectively as a member or leader of a health care team or other professional group.
- Maintain comprehensive, timely, and legible medical records.

V. Professionalism
- Trainees will learn to practice in a collegial environment with their fellow residents, house staff from other services, faculty and consultants in other specialties as well as with nurses and paramedical personnel.
- Residents will learn how to take care of patients and families in a compassionate and humanistic way that demonstrates a commitment to their professional responsibility and an adherence to ethical principles.
- Residents are expected to demonstrate: compassion, integrity, and respect for others; a responsiveness to patient needs that supersedes self-interest; a respect for patient privacy and autonomy; accountability to patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disability, and sexual orientation.
VI. Systems-based Practice

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 work in interprofessional teams to enhance patient safety and improve patient care quality.

Evaluations

 Faculty evaluation of resident (MINI CEX, 360)
 Resident evaluation of rotation
 Resident evaluation of faculty
 Evaluation of Procedural Skills
5.3.6 Birth Spacing and Family Planning Rotation

**Duration:** R2 - 1 Block

**Location:** Primary Health Care Centers (Seeb, Ansab, South Mabella, Athaiba, Al Khoudh and Al Hail)

**Overview:**
Birth spacing and family planning rotation will be for 1 block. The resident has an opportunity to understand and demonstrate appropriate knowledge, skills and attitudes in relation to fertility control, the diagnosis and management of sexually transmitted infections including HIV and lower genital tract infections. The resident must have extensive knowledge of methods of contraception, including the various mechanisms of action, the indications, contraindications, risks and benefits, complications and side effects for use of each method. She / He must be able to inform women of options available to them.
The resident will attend the regular didactic lectures as per schedule.

**Supervision:**
Residents will be supervised by the senior doctor on service in the Birth spacing and family planning clinic at the health center.

**I. Patient Care**
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 will develop measurable competencies in the following areas:

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>ACGME Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Obtain complete history in relation to contraceptive and sexual health needs and risk assessment.</td>
<td>PC,MK,IP&amp;C,P</td>
</tr>
<tr>
<td>▪ Counsel about contraceptive options both reversible and irreversible and unplanned pregnancy options</td>
<td>PC,MK,IP&amp;C,P</td>
</tr>
<tr>
<td>▪ Deliver all methods of reversible contraception</td>
<td>PC,MK,IP&amp;C</td>
</tr>
<tr>
<td>▪ Perform appropriate examination and investigations of lower genital tract infection</td>
<td>PC,MK,IP&amp;C</td>
</tr>
<tr>
<td>▪ Recognize, counsel and plan initial management of sexual/psychosexual problems</td>
<td>PC,MK,IP&amp;C</td>
</tr>
</tbody>
</table>
II. Practice-based Learning and Improvement
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 life-long learning.
Residents are expected to develop skills and habits to be able to meet the following goals:
- Identify strengths, deficiencies, and limits in one’s knowledge and expertise;
- Set learning and improvement goals;
- Identify and perform appropriate learning activities;
- Incorporate formative evaluation feedback into daily practice;
- Use information technology to optimize learning; and,
- Participate in the education of patients, families, students, residents and other health professionals

The residents will be provided the following educational opportunities:

**Clinical work/responsibilities:**
- Attend the Birth spacing and family planning clinics
- Obtain complete history in relation to contraceptive and sexual health needs and risk assessment
- Counsel about contraceptive options both reversible and irreversible and unplanned pregnancy options
- Manage clinical situations of emergency contraception, hormonal contraception, insertion of IUCD, termination of pregnancy on medical grounds, etc
- Liaise effectively with local genitor urinary medicine colleagues for effective multidisciplinary functioning
- Research evidence-based medicine topics

**Other educational opportunities**
- Attend:
  - resident workshops and conferences
  - simulation labs as per schedule
  - teaching sessions and journal clubs
  - daily admission meetings
- Present evidence-based medicine topics at the departmental CPD activities
- Participate in M&M meetings

III. Medical Knowledge
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.
The following learning resources have been chosen for this rotation:
Berek & Novak's Gynecology, by Jonathan S Berek (Editor) Lippincott Williams & Wilkins; (Latest Edition)  

IV. Interpersonal Skills & Communication
Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. Residents are expected to:
- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;
- Work effectively as a member or leader of a health care team or other professional group; and,
- Maintain comprehensive, timely, and legible medical records.

V. Professionalism
- Trainees will learn to practice in a collegial environment with their fellow residents, house staff from other services, faculty and consultants in other specialties as well as with nurses and paramedical personnel.
- Residents will learn how to take care of patients and families in a compassionate and humanistic way that demonstrates a commitment to their professional responsibility and an adherence to ethical principles.
- Residents are expected to demonstrate: compassion, integrity, and respect for others; a responsiveness to patient needs that supersedes self-interest; a respect for patient privacy and autonomy; accountability to patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disability, and sexual orientation.

VI. Systems-based Practice
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 work in inter-professional teams to enhance patient safety and improve patient care quality.

Evaluations
- Faculty evaluation of resident (MINI CEX, 360)
- Resident evaluation of rotation
- Resident evaluation of faculty
- Evaluation of Procedural Skills
5.3.7 Assessment Room Rotation

**Duration:** R1 & R2 - 1 Block

**Location:** Khoula Hospital and Royal Hospital

**Overview:**
During the Assessment room rotation residents will be exposed to a wide range of obstetric and gynecological emergencies. They will gain competence in taking relevant history, examination and order relevant investigations. They will be able to observe and do immediate management of various conditions ranging from threatened abortion and ectopic pregnancy to life threatening hemorrhage and collapse. Emergency management involves starting intravenous line, taking blood samples for investigations and cross-matching, attending to airway, breathing, and circulation along with other resuscitatory measures. On call duties will be as per the schedule.

**Supervision:**
Supervision is by the senior doctor in the morning and emergency hours.

I. Patient Care

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 will develop measurable competencies in the following areas:

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>ACGME Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate and treat acute obstetric and gynecological conditions</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Triage patients requiring immediate attention</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Triage patients to labor, antenatal and Gynecology wards according to the clinical condition</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Learn basic and advanced CPR</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Learn indication and use of life-saving devices</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Effective use of ultrasound in detection of hemorrhage, placental localization, fetal viability and presentation</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Emergency management of eclampsia</td>
<td>MK, PC, SBP</td>
</tr>
<tr>
<td>Emergency management of medical disorders in pregnancy</td>
<td>MK, PC, SBP</td>
</tr>
<tr>
<td>Learn differential diagnosis and</td>
<td></td>
</tr>
</tbody>
</table>
management of acute abdominal pain in pregnancy MK, PC

- Identify the symptoms and signs of deep vein thrombosis and pulmonary embolism MK, PC
- Identify the causes of abnormal uterine bleeding and effective use of ultrasound in identifying the cause MK, PC
- Causes and management of acute urinary infection in pregnancy and non pregnant state MK, PC
- Causes and management of acute pelvic inflammatory diseases MK, PC
- Effectively communicate transitions of care PC, IP&C, P

II. Practice-based Learning and Improvement
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 life-long learning.

Residents are expected to develop skills and habits to be able to meet the following goals:
- Identify strengths, deficiencies, and limits in one’s knowledge and expertise;
- Set learning and improvement goals;
- Identify and perform appropriate learning activities.

The resident will be provided the following educational opportunities:

**Clinical work/responsibilities:**
- Attend to emergency patients
- Arrange follow up care
- Participate in clinical teaching rounds

**Other Educational Activities:**
- Attend didactic lectures
- Attend training courses: ALSO, MOET, PROMPT (as organized by OMSB)
- Participate in M&M meetings
- Attend teaching sessions and journal clubs
- Attend daily admission meetings

III. Medical Knowledge
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. Resident should have knowledge about the following conditions:

- Early pregnancy complications (MK, PC)
  - Miscarriages (Threatened, Incomplete, Inevitable, Delayed and Septic). Know the protocols of medical and surgical management of miscarriages and follow up.
  - Diagnosis and management of ectopic pregnancy including medical, surgical and conservative.
- Causes of abdominal pain in pregnancy (MK, PC)
  - Gynecological complications in pregnancy e.g. Urinary tract infection, Torsion of adnexal mass, Red degeneration of fibroid
  - Surgical conditions complicating pregnancy e.g. Appendicitis
- Etiology and management second trimester miscarriages (MK, PC)
- Diagnosis and management of PPROM and Preterm Labor (MK, PC)
- Diagnosis and management of antepartum hemorrhage (MK, PC)
- Identify the indications for Crash Caesarean section and timely action (MK, PC, SBP)
- Diagnosis and management of eclampsia and other convulsive disorders (MK, PC)
- Diagnosis and management of Shock and Collapse during pregnancy and postpartum (MK, PC, SBP)
- Diagnosis and management of sexually transmitted diseases (MK, PC)
- Differential diagnosis and management of acute gynecological conditions in adolescence (MK, PC)
- Diagnosis and management of Bartholins cyst and abscess (MK, PC)

**Suggested Reading:**
- Berek & Novak's Gynecology, by Jonathan S Berek (Editor) Lippincott Williams & Wilkins; (Latest Edition)
- Williams Obstetrics Textbook (Latest Edition)
IV. Interpersonal Skills & Communication
Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

Residents are expected to:
- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds.
- Work effectively as a member of a health care team or other professional group.
- Maintain comprehensive, timely, and legible medical records.

V. Professionalism

- Trainees will learn to practice in a collegial environment with their fellow residents, house staff from other services, faculty and consultants in other specialties as well as with nurses and paramedical personnel.
- Residents will learn how to take care of patients and families in a compassionate and humanistic way that demonstrates a commitment to their professional responsibility and an adherence to ethical principles. Residents are expected to demonstrate: compassion, integrity, and respect for others; a responsiveness to patient needs that supersedes self-interest; a respect for patient privacy and autonomy; accountability to patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disability, and sexual orientation.

VI. Systems-based Practice
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 work effectively in various health care delivery settings and systems relevant to their clinical specialty.

Evaluations:
- Faculty evaluation of resident (MINI CEX, 360)
- Resident evaluation of rotation
- Resident evaluation of faculty
- Evaluation of Procedural Skills
5.3.8 Emergency Medicine Rotation

**Duration:** R1 - 1 Block

**Location:** Sultan Qaboos University Hospital/ Khoula Hospital/Royal Hospital

**Overview:**
Emergency Medicine is a 4 week rotation where residents will be exposed to a wide range of obstetric/gynecologic and non-obstetric emergencies. They will be able to observe and perform immediate management of various conditions ranging from simple trauma to life threatening conditions like cardiac arrest and cardiac tamponade. The work schedule will be according to the emergency department at the site.

**Supervision**
Supervision will be provided by the Emergency Medicine consultants and emergency room seniors doctor on duty.

I. Patient Care

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 will develop measurable competencies in the following areas:

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>ACGME Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Evaluate and treat acute medical conditions</td>
<td>MK, PC</td>
</tr>
<tr>
<td>• Triage chronic medical conditions for F/U care</td>
<td>MK, PC, IP&amp;C, P</td>
</tr>
<tr>
<td>• Treat wounds and minor trauma</td>
<td>MK, PC</td>
</tr>
<tr>
<td>• Learn healthcare systems</td>
<td>PC, IP&amp;C, P</td>
</tr>
<tr>
<td>• Learn basic and advanced CPR</td>
<td>MK, PC</td>
</tr>
<tr>
<td>• Learn indication and use of life-saving devices</td>
<td>MK, PC</td>
</tr>
<tr>
<td>• Manage acute asthma exacerbation</td>
<td>MK, PC, ICS</td>
</tr>
<tr>
<td>• Effectively communicate transitions of care</td>
<td>MK, PC, ICS, P, SBP</td>
</tr>
</tbody>
</table>

II. Practice-based Learning and Improvement

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 life-long learning.

Residents are expected to develop skills and habits to be able to meet the following goals:
Identify strengths, deficiencies, and limitations in one’s knowledge and expertise;
Set learning and improvement goals;
Identify and perform appropriate learning activities.

To achieve the above objectives, residents will be provided the following educational opportunities:

**Clinical work/responsibilities:**
- Attend to medical emergency patients
- Arrange follow up care
- Participate in clinical teaching rounds

**Other Educational Activities:**
- Attend:
  - OBGYN program teaching day
  - teaching sessions and journal clubs
  - daily admission meetings
- Emergency Medicine educational activities
- Participate in M&M meetings

**III. Medical Knowledge**
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.
Resident should have knowledge about the following conditions:
- Impact of trauma in pregnancy (MK,PC)
- Alteration in CPR technique in pregnant women (MK,PC)
- Awareness of performing Perimortem caesarean section in massive trauma and impending maternal death (MK,PC,ICS)
- Attend BLS and ACLS training courses (MK,ICS)
- Management of Status Epilepsy and Status Asthmaticus (MK,PC)
- Management of acute pulmonary edema (MK,PC)
- Knowledge of ECG and detect myocardial ischemia and infarction (MK,PC)
- Initial management of Myocardial ischemia and infarction (MK,PC)

**References and Reading Materials:**
- Management of Obstetric Emergencies and Trauma (Latest Edition)
- Williams Obstetrics (Latest Edition)

**IV. Interpersonal Skills & Communication**
Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and
collaboration with patients, their families, and health professionals. Residents are expected to:

- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;
- Work effectively as a member or leader of a health care team or other professional group; and,
- Maintain comprehensive, timely, and legible medical records

V. Professionalism Goals

- Trainees will learn to practice in a collegial environment with their fellow residents, house staff from other services, faculty and consultants in other specialties as well as with nurses and paramedical personnel.

- Residents will learn how to take care of patients and families in a compassionate and humanistic way that demonstrates a commitment to their professional responsibility and an adherence to ethical principles. Residents are expected to demonstrate: compassion, integrity, and respect for others; a responsiveness to patient needs that supersedes self-interest; a respect for patient privacy and autonomy; accountability to patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disability, and sexual orientation.

VI. Systems-based Practice

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 work effectively in various health care delivery settings and systems relevant to their clinical specialty.

Evaluations:

- End of rotation evaluation
- Resident evaluation of rotation
- Resident evaluation of faculty
- Mini-CEX (optional)
5.3.9 Research Block

**Duration:** R2, R3, and R4 – 1 Block

Before the start of the block, resident is expected to give specific goals and objectives of the project/s with expected outcome/s with names of the supervisor/s to the program director.

**Location:** Sultan Qaboos University Hospital/ Khoula Hospital/ Royal Hospital

**Overview:**
Research is an integral and mandatory component of the residency training. The resident will be required to be familiar with the development, execution, data analysis, interpretation and presentation of a research project by active participation in at least one research project during residency training, to understand the basic principles of basic and applied clinical research, especially epidemiology and biostatistics, and to be able to critically appraise and summarize the literature on a given subject.

Scope of research includes, but not limited to, case series studies, clinical research projects and even basic science projects. Supervising faculty will be available to discuss concepts and research approach. The research project must be submitted to the program director in written form before finishing year 5 and before starting year 6 of residency. The resident is expected to prepare a poster or oral presentation of project. Resident will present at the Program Research Day and OMSB research day/or a national meeting.

Activities that will fulfill the research requirement include:
1- Case Report write-ups and presentation with literature review
2- Retrospective reviews of obstetrical and gynecological experiences
3- Prospective clinical investigation of new procedures
4- Prospective clinical investigation of new drugs
5- Basic science project
6- Audit project for quality assurance purpose

Assistance in research design and statistical means testing is available through the research department in OMSB.

**I. Medical Knowledge**
- The resident is expected to develop a background knowledge about the research project
- The resident is expected to displays adequate knowledge of the research, particularly unanswered questions in the particular area of interest.
- The resident is able to explain the clinical relevance of the research approach employed.
- The resident is expected to know how to obtaining resources for research project
- The resident is expected to participates in application for internal or external funding support
- The resident is expected to demonstrate appropriate research skills (both laboratory and information-based)
- The resident is expected to demonstrate appropriate and adequate use of statistical techniques and is able to select and appropriately apply statistical procedures
- The resident is expected to demonstrate a clear understanding of the scientific and technical principles of the research techniques/platforms.

**Basic Principles of Epidemiology and Biostatistics:**

1. **Study Designs (Pros and Cons)**
   - RCT
   - Cohort
   - Case-Control
   - Crossover Trial
   - Systematic Reviews/metaanalysis

2. **Epidemiology Terminology**
   - Prospective vs. Retrospective
   - Incidence and prevalence
   - Intention-to-treat
   - Bias and confounding
   - Blinding
   - Randomization vs. Random Sampling

3. **Risk Statistics**
   - Relative risk vs. Odds ratio
   - Absolute (Attributable) Risk
   - Number Needed to Treat (NNT)

4. **P values and Confidence Intervals**

5. **Sample Size**
   - Power
   - Type I error (False positive rate)
   - Type II error (False negative rate)

6. **Diagnostic Test Statistics**
   - Sensitivity/Specificity
   - Positive/Negative predictive values
   - Association between predictive values and prevalence

7. **Type of Data**
   - Continuous (measured with an instrument or scale)
   - Nominal (counts)
   - Ordinal (nominal data with an implied order)

8. **How to choose correct statistic**
   - Type of data
- Number of groups
- Unpaired or paired

9. **Parametric vs. nonparametric statistics**
   - Parametric: continuous data that is normally distributed
   - Nonparametric: data that is not normally distributed / nominal data

10. **T test and ANOVA (vs.) Fisher’s exact test and chi square test**

11. **Basic concepts of adjustment problems**
   - Confounding variables

**Recommended Reading:**
- PDQ Statistics latest edition
- PDQ Epidemiology latest Edition, B.C.Decker

**Recommended Websites:**
- Users’ Guides Interactive Website (accessible to anyone whose University has a subscription to *JAMA* and/or *Archives* journals and for a limited time to individuals who purchased the Users’ Guides textbook. [http://ugi.usersguides.org/UGI/default.asp](http://ugi.usersguides.org/UGI/default.asp)
- Queen’s University Department of Obstetrics & Gynecology Website (includes information on *Research for Residents, Research Education, Research Road Map for Residents, Introduction to Research Course, REB submission, Funding Process, Clinical Trial Registration and Funding Agencies*). [http://meds.queensu.ca/medicine/obgyn/index.htm](http://meds.queensu.ca/medicine/obgyn/index.htm)
- APOG Introduction to Research Course information (dates, links). [http://www.apog.ca/English/Programandcourses/researchcourse.asp](http://www.apog.ca/English/Programandcourses/researchcourse.asp) (contact Phil Hahn: hahnp@post.queensu.ca)

**Time Lines during Residency (R1-R5) to attain the different components:**

**R1:** No specific requirements
- They are encouraged to start planning a research project

**R2:** Development of Research Hypothesis, Protocol and Ethics Submission
1. Pose a research question (clinical, basic, population health, educational)
2. Develop a proposal (protocol) to solve the research question (conduct an appropriate literature search based
on the research question, identify, consult and collaborate with the appropriate content experts to conduct research, and propose a methodological approach to solve the question
3. Submit for Research Ethics Board approval at local Hospital / MOH
4. The resident will select a suitable supervisor and discuss projects with them.
5. Faculty will provide a brief sketch of a research area which may be suitable for a resident research project.
6. Projects should be completed within one or two academic years; a project may be extended or may carry through to subsequent years.
7. Financial support for projects may be solicited TRC (The Research Council) through the Department and appropriate channel.
8. Research project process will be monitored during 6 monthly & annual evaluation by Clinical Competence Committee.
9. The resident should present at Annual Research Day
10. Residents should attend all OMSB courses Research Methodology I & II before proceeding for research block rotation.

R3: Carry out the research outlined in the study proposal
1. Collect the data & Analyze the results
2. Resident must present at Research Day.
3. Residents who have completed a project or who are in the final stages of completion may embark on another project.
4. Preparation for publication is encouraged.

R4: (Presentation, publication and further research)
1. Presentation of completed study results at research day / OMSB research day required if not accomplished in R3
2. Submission of project for publication is expected.

II. Interpersonal and communication skills
- The resident is expected to communicate effectively with supervisor(s), technical staff and collaborators.
- The resident is able to demonstrate oral presentation skills
- The resident is expected to provide a concise overview of research project in an intradepartmental setting
- The resident is expected to produce timely, accurate and well written research projects
- The resident is expected to generate research communication appropriate to the project (poster, presentation, and/or publication).
III. Professionalism
The resident is expected to:
- demonstrates concern and respect for others and sensitivity to gender/ethnic and other social issues, with members of the research team
- understands the importance of incorporating research ethics, with particular attention to patient confidentiality, in project design
- demonstrate continuous learning commitment to life-long learning and self-directed study
- critically appraise the scientific literature, incorporating findings into the design and presentation of the research project.
- transmit research findings to fellow trainees and the academic community when needed in different settings

IV. Systems-Based Practice
The resident is expected to:
- maintain Team Relationships
- recognizes the importance of a collaborative approach to translational research
- seek consults with clinical/scientists collaborators in an effective and timely manner
- demonstrate appropriate use of information technology for pertinent literature searches
- have clear understanding of the principles of laboratory safety and to abide by those standards
- discloses all pertinent data to supervisor(s)
- demonstrate knowledge of regulations pertaining to handling and storage of research data pertaining to individual patients.

Evaluations:
- Resident evaluation by 360 degree
- End of rotation evaluation of residents
- Resident evaluation of rotation
- Resident evaluation of faculty
5.3.10 Senior Obstetric Rotation

Duration:  
R3 – 5 Blocks  
R5 & R6 – 4 Blocks

Location: Sultan Qaboos University Hospital / Khoula Hospital / Royal Hospital

Overview:  
This Senior Obstetric rotation is an educational opportunity at Sultan Qaboos University Hospital, Khoula Hospital or Royal Hospital for 5 blocks during R3 and 4 blocks during R5 and R6. Residents will be working in obstetric teams in respective hospital, gaining team experience with graduated responsibilities and chain of command based training. They will be managing low risk cases independently and complicated cases under supervision of senior obstetricians. The resident on this rotation participates in covering calls at allocated hospital and will be trained for 2nd on call duties & will be allocated appropriate on call responsibilities after assessing their acquired skill level. By the end of R4 the resident must be capable of doing independent 2nd on call duties. On call duties will be as per call schedule.

Supervision:  
As the senior level, the resident has the authority to assign responsibilities for daily activities and to finalize clinical decisions in consultation with senior obstetrician. The ultimate responsibility is that of the senior specialist assigned to the service, who is immediately available and providing 24 hour coverage.

I. Patient Care  
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 will develop measurable competencies in the following areas:

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>ACGME Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Evaluate and manage high risk pregnancy</td>
<td>MK, PC, ICS, P</td>
</tr>
<tr>
<td>• Recognize and manage labor complications</td>
<td>MK, PC, ICS</td>
</tr>
<tr>
<td>• Evaluate &amp; manage complicated labor</td>
<td>MK, PC</td>
</tr>
<tr>
<td>• Perform operative vaginal deliveries under supervision</td>
<td>MK, PC</td>
</tr>
<tr>
<td>• Perform complicated cesarean deliveries under supervision</td>
<td>MK, PC</td>
</tr>
<tr>
<td>• Assist junior residents with</td>
<td></td>
</tr>
</tbody>
</table>
Cesarean deliveries MK, PC
- Repair complicated vaginal lacerations under supervision MK, PC
- Repair 3rd and 4th degree perineal tears under supervision MK, PC
- Communicate with colleagues and patients P, ICS, SBP
- Manage antepartum rounds MK, PC, ICS, P
- Perform obstetric ultrasound MK, PC
- Recognize and treat antepartum complications MK, PC, PBLI

II. Practice-based Learning and Improvement
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 life-long learning. Residents are expected to develop skills and habits to be able to meet the following goals:
- Identify strengths, deficiencies, and limits in one’s knowledge and expertise;
- Identify and perform appropriate learning activities;
- Systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement;
- Incorporate formative evaluation feedback into daily practice;
- Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems;
- Use information technology to optimize learning; and,
- Participate in the education of patients, families, students, residents and other health professionals.

The residents will be provided the following educational opportunities:

**Clinical work/responsibilities:**
- Supervise management of labor & delivery
- Conduct rounds and present patient cases
- Supervise labor and delivery sign-off rounds
- Research evidence-based medicine topics

**Other Educational Activities:**
- Attend:
  - perinatal meetings
  - Grand Rounds
  - teaching sessions and journal clubs
  - daily admission meetings
- Select & present cases for perinatal audit meeting
Present perinatal statistics in perinatal audit meetings with neonatologist
Participate in M&M meetings

III. Medical Knowledge
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.

- Antepartum Care
  The resident must have an extensive knowledge of the following:
  - Maternal physiological changes in pregnancy, fetal development and physiology, antepartum assessment of mother and fetus, and the effects of underlying medical, surgical and social environmental conditions on pregnancy.
  - Genetic screening, testing and counseling.
  - Medical, surgical and psychosocial complications of pregnancy and their appropriate management, including timely consultation or transfer of care.
  - Prevention, pathophysiology, investigation, diagnosis and management of common obstetric complications at all stages of pregnancy, labor and postpartum.

- Intrapartum Care:
  - Management of normal and complicated labor and delivery.
  - Assess maternal and fetal health and progress in labor utilizing history and physical examination, intermittent auscultation, electronic fetal monitoring, basic ultrasound imaging and fetal blood sampling.
  - Acquire the knowledge of induction and augmentation of labor including indications, methodology, pharmacology, management of complications.

- Delivery:
  - Techniques of spontaneous and assisted vaginal delivery.
  - Ability to identify principles of assisted delivery, forceps delivery, vacuum extraction and cesarean section, breech delivery, management of shoulder dystocia, repair of vaginal/perineal lacerations and vaginal birth after cesarean delivery.
  - Pharmacological and non-pharmacological methods of pain relief in labor including their risks and benefits.

- Postpartum:
  - Puerperium and postpartum care, including recognition and management of early and delayed postpartum
hemorrhage and sepsis, promotion of breast feeding, family planning, recognition of risk factors for depression and support in psychosocial adjustment.

Suggested reading:
- Williams Obstetrics, (Latest Edition)
- High Risk Pregnancy, Philip Steer (Latest Edition)
- Maternal Fetal Medicine, Creasy (Latest Edition)
- Medical Disorders in Pregnancy, Catherine Nelson-Piercy (Latest Edition)
- Relevant international recommendations/guidelines from RCOG (www.rcog.org.uk), SOGC (www.sogc.org), ACOG (www.acog.com)

IV. Interpersonal Skills & Communication
The resident must achieve a high level of competence in communicating with patients and relatives. She/He must also develop effective oral and written communication skills with other members of the health care team.

Residents are expected to:
- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;
- communicate effectively with physicians, other health professionals, and health related agencies;
- Act in a consultative role to other physicians and health professionals; and,
- Maintain comprehensive, timely, and legible medical records

V. Professionalism
- The resident will learn to demonstrate ethical, empathetic and professional behavior showing an awareness of personal limitations and seeking consultation appropriately. She/He must demonstrate leadership qualities and the ability to co-operate with other members of the health care team.
- Trainees will learn to practice in a collegial environment with their fellow residents, house staff from the department and other specialties as well as with nurses and paramedical personnel.
- Residents will learn how to take care of patients and families in a compassionate and humanistic way that demonstrates a commitment to their professional responsibility and an adherence to ethical principles. Residents are expected to demonstrate: compassion, integrity, and respect for others; a responsiveness to patient needs that supersedes self-interest; a respect for patient privacy and autonomy; accountability to patients, society and the profession;
sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disability, and sexual orientation.

VI. Systems-based Practice
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:
- Coordinate patient care within the health care system relevant to their clinical specialty;
- advocate for quality patient care and optimal patient care systems;
- Participate in identifying system errors and implementing potential system solutions

Evaluations:
- Faculty evaluation of resident (Mini-CEX, 360 degree)
- Resident evaluation of rotation
- Resident evaluation of faculty
- DOPS evaluation for procedures performed
- Resident peer evaluation (360 degree)
5.3.11 General Gynecology Rotation (R3, R5 & R6)

**Duration:**
- R3 – 3 Blocks
- R5 & R6 – 4 Blocks

**Location:** Sultan Qaboos University Hospital/ Khoula Hospital/ Royal Hospital and Sohar Hospital

**Overview:**
Senior General Gynecology rotation will include 3 blocks during R3 and 4 blocks in R5/R6. The resident performs minor and major gynecological surgical procedures and complex procedures under supervision. They assist the junior residents on other surgical cases. The senior resident is responsible for supervising the management of postoperative patients and provides outpatient coverage. Gynecology is a total team experience with graduated responsibilities and chain of command by level of training. Residents are assigned 2nd on call duties after assessment. The on call duties are covered as per schedule.

**Supervision:**
The senior doctor in service is responsible for assigning duties and manages clinical decisions. The resident at this senior level will take responsibility taking clinical decisions about patient’s management in consultation with senior gynecologist. They will be supervising the junior residents, interns & 1st on call doctors during their 2nd on call duties.

**I. Patient Care**
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 will develop measurable competencies in the following areas:

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>ACGME Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtain complete complex gynecologic histories</td>
<td>PC, MK, ICS, P</td>
</tr>
<tr>
<td>Perform gynecologic exams</td>
<td>PC, MK</td>
</tr>
<tr>
<td>Perform preoperative evaluations</td>
<td>PC, MK</td>
</tr>
<tr>
<td>Perform sonohysterograms/ hysterosalpingograms</td>
<td>PC, MK</td>
</tr>
<tr>
<td>Understand pathophysiology of complex disorders</td>
<td>MK, PC, PBLI</td>
</tr>
<tr>
<td>Manage postoperative patients</td>
<td>PC, MK, ICS, P</td>
</tr>
<tr>
<td>Perform major gynecologic surgical procedures under supervision</td>
<td>PC, MK</td>
</tr>
<tr>
<td>Evaluate acute gynecologic surgical emergency patients</td>
<td>PC, MK, SBP</td>
</tr>
<tr>
<td>Perform Gynecological ultrasound</td>
<td></td>
</tr>
</tbody>
</table>
II. Practice-based Learning and Improvement
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 life-long learning.

Residents are expected to develop skills and habits to be able to meet the following goals:
- identify strengths, deficiencies, and limits in one’s knowledge and expertise;
- identify and perform appropriate learning activities;
- systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement;
- incorporate formative evaluation feedback into daily practice;
- locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems;
- use information technology to optimize learning; and,
- participate in the education of patients, families, students, residents and other health professionals.

The residents will be provided the following educational opportunities:

**Clinical work/responsibilities:**
- Attend gynecologic clinics
- Perform gynecologic surgeries
- Perform major surgical procedures under supervision
- Attend pre-operative rounds with senior Gynecologist
- Evaluate surgical cases

**Other Educational Activities:**
- Participate in:
  - Grand Rounds
  - gynecologic M&M meeting
  - Gyn Pathology and Radiology rounds
- Attend:
  - teaching sessions and journal clubs
  - daily admission meetings

III. Medical Knowledge
Residents must demonstrate knowledge of common benign gynecological disorders. The resident must acquire detailed knowledge about surgical complications associated with gynecological surgeries & their management plans.
The resident must acquire knowledge in following subjects:

- Pathogenesis, diagnosis and management of endometriosis
- Congenital anomalies of female genital tract
- Diagnosis and management of genital prolapse
- Diagnosis and management of uterine fibroid
- Evaluation of and management of pelvic masses
- Diagnosis and management of ectopic pregnancy
- Diagnosis and management of polycystic ovaries
- Diagnosis and management of Sexually transmitted diseases & HIV infections
- Chronic Pelvic pain
- Screening for Breast Cancer
- Diagnosis and management of amenorrhea
- Basics of Diagnosis and management of urinary incontinence
- Pathophysiology, evaluation and treatment of hirsutism
- Diagnosis and management of Menopause
- Diagnosis and management of vulval and vaginal benign diseases
- Application of colposcopy, hysteroscopy in Gynecological disease
- Diagnosis and management of cervical and uterine benign disorders
- Diagnosis and management of benign ovarian masses
- Adolescent Gynecological problems
- Diagnostic Procedures and Techniques in gynecology- understanding of the indications, risks and benefits, limitations and role of the following investigative techniques e.g
  - Transabdominal ultrasound for gynecologic disease
  - Transvaginal ultrasound for gynecologic disease
  - CT and MRI scanning of the pelvis
  - Hysterosalpingography

Suggested Reading:
- Berek & Novak’s Gynecology , by Jonathan S Berek (Editor) Lippincott Williams & Wilkins; (Latest Edition)

Recommended Optional Reading:
- Progress in Obstetrics & Gynecology, Studd Churchill Livingstone (latest 3 volumes)
- Recent advances in Obstetrics & Gynecology, Bonner- RSM Press (latest 3 volumes)
- Gynecology -Shaw, Stanton & Soutten, Churchill Livingstone
IV. Interpersonal Skills & Communication

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and in collaboration with patients, their families, and health professionals.

Residents are expected to:

- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;
- Communicate effectively with physicians, other health professionals, and health related agencies;
- Act in a consultative role to other physicians and health professionals; and,
- Maintain comprehensive, timely, and legible medical records.

V. Professionalism

Trainees will learn to practice in a collegial environment with their fellow residents, house staff from other services, faculty and consultants in other specialties as well as with nurses and paramedical personnel.

Residents will learn how to take care of patients and families in a compassionate and humanistic way that demonstrates a commitment to their professional responsibility and an adherence to ethical principles. Residents are expected to demonstrate: compassion, integrity, and respect for others; a responsiveness to patient needs that supersedes self-interest; a respect for patient privacy and autonomy; accountability to patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disability, and sexual orientation.

VI. Systems-based Practice

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.

Evaluations:

- Faculty evaluation of resident (MINI CEX, 360)
- Resident evaluation of rotation
- Resident evaluation of faculty
- Evaluation of Procedural Skills (DOPS)
5.3.12 Maternal Fetal Medicine Rotation

**Duration:**
- R4 (Rotation in Saudi) – 3 Blocks
- R5 and R6 – 3 Blocks

**Location:** Sultan Qaboos University Hospital/ Royal Hospital/ Saudi Arabia

**Overview:**
Rotation provides the resident opportunity of exposure to the breadth of high risk obstetrics in maternal fetal medicine unit for 3 blocks during the Saudi rotation and 3 blocks during R5 & R6 at Royal Hospital and SQUH. This is a total team experience with graduated responsibilities and chain of command based on level of training. The resident on this rotation participates in covering on calls at allocated hospital and will follow the team schedule in daily work, manage high risk obstetrical patients in the clinic and inpatient hospital setting. In the outpatient setting, the resident will participate in the genetic counseling sessions, ultrasounds, maternal fetal medicine consults and prenatal visits. The resident is expected to acquire & demonstrate a detailed knowledge of core areas in Maternal Fetal Medicine. The resident will be able to perform intermediate and some major surgical procedures under supervision. By 4th Year the Resident would be able to perform 2nd / registrar level on call duty independently.

**Supervision:**
The senior doctor in service is responsible for assigning duties and manages clinical decisions. The resident at this senior level will take responsibility taking clinical decisions about patient's management in consultation with senior obstetrician. They will be supervising the junior residents, interns & 1st on call doctors during their 2nd on call duties.

**I. Patient Care**
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 will develop measurable competencies in the following areas:

**Learning Objectives**

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>ACGME Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate and manage High Risk pregnancies</td>
<td>MK, PC, ICS, P</td>
</tr>
<tr>
<td>Recognize &amp; diagnosis medical diseases associated with pregnancy</td>
<td>MK, PC, ICS</td>
</tr>
<tr>
<td>Manage normal &amp; abnormal labor</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Perform Operative vaginal deliveries</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Perform Cesarean deliveries</td>
<td>MK, PC</td>
</tr>
</tbody>
</table>
- Repair complicated vaginal lacerations, higher grade perineal tears MK, PC
- Manage postpartum complications MK, PC
- Perform basic obstetric ultrasound MK, PC
- Perform advanced obstetric ultrasound under supervision MK, PC
- Participate in genetic counselling sessions MK, PC

II. Practice-based Learning and Improvement
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 life-long learning.

Residents are expected to develop skills and habits to be able to meet the following goals:

- Identify strengths, deficiencies, and limits in one’s knowledge and expertise;
- Set learning and improvement goals;
- Identify and perform appropriate learning activities

Residents will be provided the following educational opportunities:

Clinical work/responsibilities
- Manage Labor & Delivery suite
- Attend Maternal medicine & high risk OB clinics,
- Attend Fetal medicine clinics
- Attend teaching rounds and present cases
- Research evidence-based medicine topics
- Participate in fetal medicine rounds
- Participate in ultrasound guided invasive procedures.

III. Medical Knowledge
The resident is expected to acquire & demonstrate a detailed knowledge of core areas in Maternal Fetal Medicine. They must be able to recognize those factors in history and physical examination that indicate possible medical or obstetric complications.

The resident must achieve medical knowledge in the following areas:

- Diagnosis, Management & follow up of medical diseases of pregnancy
  - Hypertensive disorders with pregnancy
  - Endocrine disorders with pregnancy
Cardiac disease with pregnancy
- Autoimmune disorders with pregnancy
- Neurological disease with pregnancy
- Hematological disorders in pregnancy
- Gastroenterological diseases in pregnancy
- Renal disease with pregnancy
- Liver diseases with pregnancy
- Viral infections with pregnancy

- Diagnosis, Management & follow up of surgical diseases of pregnancy
- Management of acute obstetric emergencies (Overview of Rupture uterus, Pulmonary Embolism, Amniotic fluid embolism)
- Management of iso-immunized pregnancy
- Management of intrauterine growth restriction
- Management of Multiple pregnancies
- Peripartum psychiatric disorders
- Diagnosis and management of ante partum Hemorrhage (including DIC)
- Definition, classification and management of postpartum hemorrhage
- Detailed knowledge of inheritance of genetic diseases
- Ultrasound diagnosis of congenital anomalies

Suggested reading:
- Williams Obstetrics, (Latest Edition)
- High Risk Pregnancy, Philip Steer (Latest Edition)
- Maternal Fetal Medicine, Creasy (Latest Edition)
- Medical Disorders in Pregnancy, Catherine Nelson-Piercy (Latest Edition)

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

Residents are expected to:
- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;
- Work effectively as a member or leader of a health care team or other professional group; and,
- Maintain comprehensive, timely, and legible medical records.

V. Professionalism
- Trainees will learn to practice in a collegial environment with their fellow residents, house staff from the department and staff in other specialties as well as with nurses and paramedical personnel.
Residents will learn how to take care of patients and families in a compassionate and humanistic way that demonstrates a commitment to their professional responsibility and an adherence to ethical principles. Residents are expected to demonstrate: compassion, integrity, and respect for others; a responsiveness to patient needs that supersedes self-interest; a respect for patient privacy and autonomy; accountability to patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disability, and sexual orientation.

VI. Systems-based Practice
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 work effectively in various health care delivery settings and systems relevant to their clinical specialty.

Evaluations
- Faculty evaluation of resident (MINI CEX, 360)
- Resident evaluation of rotation
- Resident evaluation of faculty
- DOPS evaluation for procedures performed
- Resident peer evaluation
5.3.13 Gynecologic Oncology Rotation

Duration: R4 - 3 Blocks
R5 & R6 - 3 Blocks

Location: Sultan Qaboos University Hospital/ Royal Hospital/ Saudi Arabia

Overview:
The rotation will comprise of 3 blocks rotation during R4 in Saudi Arabia and 3 blocks rotation during R5 & R6 in Royal Hospital and SQUH.
The resident will participate in the evaluation and treatment planning for gynecologic oncology patients. The resident will participate in all clinical activities involving the gynecologic oncology outpatient clinics, colposcopy clinics, inpatients, rounds, operating theater, charting, and providing emergency evaluations for gynecologic oncology patients. The resident will supervise and teach medical students assigned to the service. The resident must report to the senior doctors in the Gynecologic Oncology team and to the Consultants. The on call duties will be as per call schedule.

Supervision:
All outpatient services, surgical procedures, and clinical activities will be supervised by the specialist/ senior specialist with the ultimate responsibility for supervision by the consultant in Gynecologic Oncology.

I. Patient Care
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 will develop measurable competencies in the following areas:

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>ACGME Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn the risk factors for developing gynecologic malignancy</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Understand screening and detection of gynecologic cancer</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Describe methods of evaluating cancer patients</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Understand principles of radiation therapy</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Understand mechanisms of action of chemotherapy</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Understand surgical options for treating pelvic cancer</td>
<td>MK, PC</td>
</tr>
</tbody>
</table>
- Understand anatomic and physiologic changes in cancer MK, PC
- Learn the management of gestational trophoblastic disease MK, PC
- Understand surgical staging of gynecological cancers MK, PC
- Learn principles of terminal care MK, PC

II. Practice-based Learning and Improvement
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 life-long learning.

Residents are expected to develop skills and habits to be able to meet the following goals:
- Identify strengths, deficiencies, and limits in one’s knowledge and expertise;
- Set learning and improvement goals;
- Identify and perform appropriate learning activities;
- Incorporate formative evaluation feedback into daily practice;
- Use information technology to optimize learning; and,
- Participate in the education of patients, families, students, residents and other health professionals.

Residents will be provided the following educational opportunities:

**Clinical work/responsibilities:**
- Participating in clinical and teaching rounds
- Assisting and performing surgical procedures
- Evaluating oncology patients for emergency care
- Evaluating patients in gynecologic oncology clinics
- Participating and conducting oncology consultations

**Other Educational Activities:**
- Attend:
  - tumor board meetings
  - teaching sessions and journal clubs
  - daily admission meetings
- Participate in M&M meetings

III. Medical Knowledge
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.
Topics to be read:
- Biology & Genetics
- Biologic, Targeted and Immune Therapies
- Pathology
- Tumor Markers and Screening
- Cervical Cancer
- Pre-invasive Disease
- Uterine Cancer
- Gestational Trophoblastic Neoplasia
- Epithelial Ovarian, Fallopian Tube, and Peritoneal Cancer
- Germ Cell and Nonepithelial Ovarian Cancer
- Vaginal Cancer
- Vulvar Cancer
- Chemotherapy
- Radiation Therapy
- Epidemiology and Statistics
- Breast Disease
- Cancer and Pregnancy
- Pre-op Evaluation, Medical Management, and Critical Care
- Nutrition Therapy
- Surgical Therapies
- Laparoscopy and Robotics
- Pelvic Exenteration
- Communication Skills
- Symptom Relief and Palliative Care
- Psychological Issues

Suggested Reading:
- Berek & Novak’s Gynecology, by Jonathan S Berek (Editor) Lippincott Williams & Wilkins; (Latest Edition)
- Practical Gynecologic Oncology, by Berek & Hacker (Latest Edition)

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

Residents are expected to:
- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;
- Work effectively as a member or leader of a health care team or other professional group; and,
- Maintain comprehensive, timely, and legible medical records

V. Professionalism
- Trainees will learn to practice in a collegial environment with their seniors, house staff from other services, faculty and consultants in other specialties as well as with nurses and paramedical personnel.

- Residents will learn how to take care of patients and families in a compassionate and humanistic way that demonstrates a commitment to their professional responsibility and an adherence to ethical principles. Residents are expected to demonstrate: compassion, integrity, and respect for others; a responsiveness to patient needs that supersedes self-interest; a respect for patient privacy and autonomy; accountability to patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disability, and sexual orientation.

VI. Systems-based Practice
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 work in inter-professional teams to enhance patient safety and improve patient care quality.

Evaluations
- Faculty evaluation of resident (MINI CEX, 360)
- Resident evaluation of rotation
- Resident evaluation of faculty
- Evaluation of Procedural Skills (DOPS)
5.3.14 Uro-gynecology (R4, R5, R6)

**Duration:**  
R4 - 3 Blocks during in Saudi Arabia  
R5 & R6 - 3 Blocks

**Location:** Sultan Qaboos University Hospital/ Royal Hospital/ Saudi Arabia

**Overview:**  
Uro-Gynecology rotation will be for total of 6 blocks where the resident has an opportunity to learn basic and advanced uro-gynecology. The service consists of patient care in the uro-gynecology clinic, ward and operation theatre. The resident learns the basics of taking a detailed gynecological history, performs gynecological examinations, performs or orders relevant investigations and plan management in patients with uro-gynecological disorders. They also learn pre-operative evaluation, assist and perform for uro-gynecological procedures and learn post-operative management.  
The resident will attend the regular didactic lectures as per schedule.  
The residents will participate in the call duty schedule of the hospital.

**Supervision:**  
Residents will be supervised by senior doctors at each site.

I. Patient Care  
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 will develop measurable competencies in the following areas:

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>ACGME Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtain complete history and physical examination</td>
<td>PC, MK, ICS, P</td>
</tr>
<tr>
<td>Perform transvaginal pelvic ultrasounds</td>
<td>PC, MK</td>
</tr>
<tr>
<td>Perform PAP smear and pelvic examination</td>
<td>PC, MK, ICS</td>
</tr>
<tr>
<td>Perform urodynamics studies</td>
<td>PC, MK</td>
</tr>
<tr>
<td>Understand pathophysiology of common Uro-gynecological disorders</td>
<td>PC, MK, PBLI</td>
</tr>
<tr>
<td>Perform minor and assist in uro-gynecological surgeries</td>
<td>PC, MK</td>
</tr>
<tr>
<td>Assist for major complicated uro-gynecological surgical procedures</td>
<td>PC, MK</td>
</tr>
<tr>
<td>Assist in the management of postoperative patients</td>
<td>PC, MK, ICS, P</td>
</tr>
</tbody>
</table>
II. Practice-based Learning and Improvement
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 life-long learning. Residents are expected to develop skills and habits to be able to meet the following goals:

- Identify strengths, deficiencies, and limits in one’s knowledge and expertise;
- Set learning and improvement goals;
- Identify and perform appropriate learning activities;
- Incorporate formative evaluation feedback into daily practice;
- Use information technology to optimize learning; and,
- Participate in the education of patients, families, students, residents and other health Professionals.

Residents will be provided the following educational opportunities:

**Clinical work/responsibilities:**
- Attend uro-gynecology clinics
- Attend uro-gynecology teaching rounds
- Preoperative and postoperative assessment and evaluate surgical patients
- Perform uro-gynecological surgeries
- Research evidence-based medicine topics

**Other educational opportunities**
- Attend grand rounds and resident workshops and conferences
- Attend and participate in histopathology meetings
- Present evidence-based medicine topics at teaching rounds
- Present evidence-based medicine topics at the departmental activities
- Attend simulation labs as per schedule
- Participate in M&M meetings
- Attend teaching sessions and journal clubs
- Attend daily admission meetings

III. Medical Knowledge
The practice of uro-gynecology includes both surgical and non-surgical treatment of disorders of the female reproductive tract. In acquiring skills and knowledge in the discipline of uro-gynecology, the resident should assimilate diagnostic and therapeutic principles underlying a broader spectrum of medical and surgical disorders.

Resident should have knowledge about the following conditions:

- Embryology, developmental biology and genetics
- Anatomy and physiology of the female reproductive system
- Patho-physiology, investigation, diagnosis, and management of:
  - Stress urinary incontinence and urodynamic stress incontinence
  - Urge urinary incontinence and detrusor over activity
  - Voiding dysfunction, including postoperative and postpartum urinary retention, bladder outlet obstruction, and detrusor hypotonia
  - Pelvic organ prolapse, including pessary care.
  - Lower urinary tract disorder
    - urethral disorders
    - pain
    - fistula
    - effects of radical pelvic surgery
    - effects of irradiation
  - Urinary disorders associated with other conditions:
    - pregnancy
    - gynaecological pathology
    - elderly patients
    - neurological conditions
- Indications and limitations of investigations:
  - Urodynamic investigations:
    - voiding charts
    - ambulatory monitoring
    - urodynamic equipment
    - uroflowmetry
    - standard subtracted cystometry
  - Imaging:
    - upper urinary tract
    - lower urinary tract
    - pelvic floor
- Indications, techniques, limitations and complications of treatment:
  - Non-surgical:
    - pads and garments
    - bladder retraining
    - pelvic floor exercises
    - self-catheterisation
    - long-term indwelling catheterisation
    - community care
  - Drug:
    - anticholinergics
    - anti-muscarinic
    - alpha blockers
    - antidepressants
    - estrogens
  - Surgical:
    - urethral dilatation
    - urethrocystoscopy
• suprapubic catheterization
• periurethral injectables
• anterior repair
• vaginal hysterectomy
• vaginal repair of genital tract prolapse
• sling procedures
• colposuspension
• repair of recurrent prolapse
• fistula repair
• urinary diversion
• Injectables

▪ Disorders of the urogenital tract and breast
  o Abnormal and dysfunctional uterine bleeding
  o Vaginal and vulvar infections
  o Vulvar dystrophies, dermatoses and vulvar pain syndromes
  o Sexually transmitted diseases
  o Pelvic inflammatory disease
  o Pelvic masses
  o Chronic pelvic pain
  o Benign disorders of the breast
▪ Pre-operative, intra operative and post-operative care
▪ Critical care
  o Toxic shock syndrome
  o Acute blood loss

Suggested Reading:
▪ Berek & Novak’s Gynecology, by Jonathan S Berek (Editor) Lippincott Williams & Wilkins; (Latest Edition)
5.3.15 Reproductive endocrinology and infertility R4, R5, R6

**Duration:**
- R4 - 3 Blocks in Saudi Arabia
- R5 & R6 - 3 Blocks in Royal Hospital, SQUH

**Location:** Sultan Qaboos University Hospital/ Royal Hospital/ Saudi Arabia

**Overview:**
During these 6 blocks rotation the resident will gain knowledge about the subspeciality of REI and learn the principles of reproductive endocrinology that can be applied to general practice. They will also learn the basics of embryology, conception, congenital anomalies and endocrine control of the reproductive system. The resident will attend the regular didactic lectures as per schedule. The residents will participate in the call duty schedule of the hospital.

**Supervision:**
Residents will be supervised by senior doctors at each site.

I. Patient Care
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 will develop measurable competencies in the following areas:

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>ACGME Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand developmental embryoology</td>
<td>PC, MK</td>
</tr>
<tr>
<td>Understand ovulation and endocrine control of the reproductive system</td>
<td>PC, MK</td>
</tr>
<tr>
<td>Understand genital anomalies and puberty</td>
<td>MK</td>
</tr>
<tr>
<td>Perform basic infertility evaluations</td>
<td>MK, PC, ICS, P</td>
</tr>
<tr>
<td>Understand indications for ART procedures</td>
<td>MK, PC, PBLI</td>
</tr>
<tr>
<td>Learn indications for infertility surgery</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Perform infertility ultrasounds</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Learn methods of contraception</td>
<td>MK, PC</td>
</tr>
<tr>
<td>Evaluate and treat PCOS</td>
<td>MK, PC, ICS</td>
</tr>
<tr>
<td>Evaluate and treat AUB</td>
<td>MK, PC, IP&amp;C</td>
</tr>
<tr>
<td>Understand menopause and HRT</td>
<td>MK, PC, PBLI, ICS</td>
</tr>
<tr>
<td>Evaluate and treat osteoporosis</td>
<td>MK, PC, PBLI, ICS</td>
</tr>
</tbody>
</table>
II. Practice-based Learning and Improvement
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 life-long learning.

Residents are expected to develop skills and habits to be able to meet the following goals:
- identify strengths, deficiencies, and limits in one’s knowledge and expertise;
- set learning and improvement goals;
- identify and perform appropriate learning activities;
- incorporate formative evaluation feedback into daily practice;
- use information technology to optimize learning; and,
- participate in the education of patients, families, students, residents and other health professionals.

The residents will be provided the following educational opportunities:

Clinical work/responsibilities:
- Attend REI clinics
- Observe and conduct infertility consultations
- Assist and perform infertility surgery
- Assist and perform ART procedures
- Literature searches
- Perform evidenced based medicine

Other Educational Activities:
- Attend:
  - gynecologic pre-operative conference
  - Grand Rounds and Resident Conferences
  - OBGYN M&M Conferences
- Participate in laparoscopic simulation lab exercises

III. Medical Knowledge
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 should have knowledge about the following conditions:
- Epidemiology, etiology, pathogenesis, clinical features, treatment and prognosis of male and female subfertility:
  - Female (ovulatory disorders, tubal disorders, endometriosis, cervical and uterine factors, genetic and developmental disorders).
  - Male (structural, endocrine, pharmacological,
infectious, lifestyle, genetic).
  • Unexplained infertility.
  • Long-term sequelae of cancer treatment.
  • Sterilisation regret

- Indications, limitations and interpretation of investigative techniques:
  • Semen analysis.
  • Endocrine assessment (see also Module 13):
    • assessment of ovulation
    • assessment of the subfertile male
    • amenorrhoea and oligomenorrhoea
    • polycystic ovary syndrome
    • hyperprolactinaemia
    • thyroid/adrenal function
    • Gonadal failure.
  • Genetic analysis:
    • Chromosome analysis, e.g. sex chromosome abnormalities
    • Genetic abnormalities, e.g. cystic fibrosis.

- Ultrasound:
  • Normal uterine and ovarian morphology.
  • Follicular tracking
  • Polycystic ovaries
  • Tubal patency

- Other imaging techniques:
  • Hysterosalpingography.
  • Pituitary imaging
  • Computed tomography
  • Magnetic resonance imaging.
  • Operative investigative procedures:
    • Diagnostic laparoscopy
    • Diagnostic hysteroscopy

- Indications, limitations, techniques and complications of:
  • Ovulation induction (clomifene, gonadotrophins, gonadotrophin-releasing hormone).
  • Other medical interventions (e.g. metformin, dopaminergic drugs).
  • Intrauterine insemination.
  • In vitro fertilisation.
  • Intracytoplasmic sperm injection.
  • Surgical sperm recovery. Legal and ethical issues:
    • Human Fertilisation and Embryology Act
    • Welfare of the child
    • Embryo storage
    • Gamete donation
    • Surrogacy

- Indications, limitations and complications of surgery in
relation to male and female infertility:
- Reversal of sterilisation and vasectomy
- Adhesiolysis
- Salpingostomy
- Surgical management of endometriosis
- Ovarian diathermy
- Myomectomy
- Hysteroscopic surgery
- Varicocele

Suggested Reading:
- Berek & Novak's Gynecology, by Jonathan S Berek (Editor) Lippincott Williams & Wilkins; (Latest Edition)

Recommended Optional Reading
- Progress in Obstetrics & Gynecology, Studd Churchill Livinstone (latest 3 volumes)
- Recent advances in Obstetrics & Gynecology, Bonner- RSM Press (latest 3 volumes)
- Gynecology -Shaw, Stanton & Soutten, Churchill Livingstone

IV. Interpersonal Skills & Communication
Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.
Residents are expected to:
- communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;
- work effectively as a member or leader of a health care team or other professional group; and,
- maintain comprehensive, timely, and legible medical records
V. Professionalism

- Trainees will learn to practice in a collegial environment with their fellow residents, house staff from other services, faculty and consultants in other specialties as well as with nurses and paramedical personnel.
- Residents will learn how to take care of patients and families in a compassionate and humanistic way that demonstrates a commitment to their professional responsibility and an adherence to ethical principles.
- Residents are expected to demonstrate: compassion, integrity, and respect for others; a responsiveness to patient needs that supersedes self-interest; a respect for patient privacy and autonomy; accountability to patients, society and the profession; sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disability, and sexual orientation.

VI. Systems-based Practice

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 work in inter-professional teams to enhance patient safety and improve patient care quality.

Evaluations

- Faculty evaluation of resident (MINI CEX, 360)
- Resident evaluation of rotation
- Resident evaluation of faculty
- Evaluation of Procedural Skills (DOPS)

Recommended Optional Reading

- Progress in Obstetrics & Gynaecology, Studd  Churchill Livinstone (latest 3 volumes)
- Recent advances in Obstetrics & Gynaecology, Bonner- RSM Press (latest 3 volumes)
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- Faculty evaluation of resident (MINI CEX, 360)
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5.4 GRADED RESPONSIBILITIES FOR EACH YEAR OF RESIDENCY

YEAR 1
1. The resident is expected to know the basic anatomy, physiology, embryology, endocrinology of reproductive tract and adaptations during pregnancy (MK & PC)

2. By the end of Year 1 she/he should be able to:
   a. take history and perform clinical examination (General Obstetric & Gynecological) (PC & ICS)
   b. request and interpret appropriate investigations and reach a provisional diagnosis of common Obstetric & Gynecological disorders (PC & MK)
   c. effectively communicate with patients and relatives and counsel accordingly under supervision (MK, ICS & P)
   d. Perform vaginal deliveries, episiotomies and suturing of episiotomies. (PC, MK)
   e. Perform preoperative evaluation of common elective/emergency surgical procedures in Obstetrics and Gynecology and manage them postoperatively. (MK & PC)
   f. Achieve competency in basic surgical skills e.g. knot tying, suturing techniques opening and closing abdomen and perform surgical procedures under supervision e.g. evacuation and curettage, primary cesarean section. (PC & MK)

3. Attitude of the resident towards patients, colleagues and other hospital staff must be cordial and cooperative at all times.

4. Should pass the end of year OMSB exam.

5. Complete the relevant courses assigned for R1.

YEAR 2
1. By the end of the year 2 the resident should be able to:
   a. Have a sound knowledge of all common Obstetric and Gynecological disorders. (MK)
   b. able to manage common Obstetric and Gynecological disorders under direct supervision (MK, PC, ICS)
   c. Consolidate surgical skills learned in year 1 and progress to performing repeat cesarean sections, instrumental deliveries, and minor laparoscopic procedures. (PC, MK)
   d. Have a research project underway. (MK, PBLI, ICS)

2. Should pass the OMSB Part I examination, end of year OMSB exam and are recommended to pass Part 1 MRCOG/MRCPI/ Arab board or equivalent.

3. Complete the relevant courses assigned for R2.
YEAR 3 and 4

1. By the end of these academic years the resident should:
   a. Have acquired detailed knowledge of all obstetrical and gynecological disorders including high risk pregnancies, medical disorders in pregnancy, gynecological oncology, and reproductive medicine. (MK, PC, SBP)
   b. Be able to perform complicated cesarean sections, laparotomy and operative laparoscopy. (MK, PC)
   c. Be able to effectively communicate with patients and relatives and counsel independently (ICS, PC, MK, P)
   d. Should be able to supervise and teach junior colleagues and medical students. (MK, P, ICS)

2. By the end of 4th year, the Resident should be able to perform 2nd / registrar level on call duty independently.

3. Should pass end of year OMSB examination; recommended to pass Arab Board Part II/ MRCOG Part II/ MRCPI or equivalent.

4. Complete the relevant courses assigned for R3 and R4.

YEAR 5 and 6

1. During these senior years, the resident should be able to:
   a. Take part in administrative responsibilities. (SBP, P, ICS)
   b. Participate actively in teaching junior residents and medical students. (MK, P, ICS)
   c. Perform most of the common obstetrical and gynecological procedures independently (MK, PC)

2. Should pass end of year OMSB examination and OMSB Part II.
## TRAINING PROGRAMME
### Year by Year Guide for Trainees

<table>
<thead>
<tr>
<th>Year Level</th>
<th>Rotations</th>
<th>Courses / Learning Resource</th>
<th>Assessment Requirements</th>
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<tbody>
<tr>
<td>Year 1</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>General Obstetrics - 5 blocks</td>
<td>Basic Communication Skills Course</td>
<td>Completion of course and necessary post course assessment</td>
</tr>
<tr>
<td></td>
<td>General Gynecology - 4 blocks</td>
<td>Basic Cardiac Life Support Course</td>
<td>End of Year Exam (100 MCQs)</td>
</tr>
<tr>
<td></td>
<td>Neonatal Intensive Care Unit (NICU) - 1 block</td>
<td>Neonatal Resuscitation Course (Provider’s)</td>
<td>Log Book Assessment</td>
</tr>
<tr>
<td></td>
<td>Basic Obstetric Ultrasound - 1 block</td>
<td>Basic Surgical Skills Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emergency Medicine - 1 block</td>
<td>End of Year Exam (100 MCQs)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Basic Communication Skills Course</td>
<td>Part 1 OMSB Exam OSCEs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Basic Obstetrics &amp; Gynecology Ultrasound Course (optional)</td>
<td>Recommended MRCOG/MRCPI/Arab Board Part 1</td>
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<tr>
<td></td>
<td>Pain Management Course</td>
<td></td>
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<tr>
<td>Year 2</td>
<td>General Obstetrics - 5 blocks</td>
<td>Advanced Cardiac Life Support Course</td>
<td>End of Year Exam (100 MCQs)</td>
</tr>
<tr>
<td></td>
<td>General Gynecology - 8 blocks</td>
<td>Basic Obstetrics &amp; Gynecology Ultrasound Course (optional)</td>
<td>Part 1 OMSB Exam OSCEs</td>
</tr>
<tr>
<td></td>
<td>Neonatal Intensive Care Unit (NICU) - 1 block</td>
<td>Neonatal Resuscitation Course (Provider’s)</td>
<td>Recommended MRCOG/MRCPI/Arab Board Part 1</td>
</tr>
<tr>
<td></td>
<td>Intensive Care Unit (ICU) - 1 block</td>
<td>Pain Management Course</td>
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<tr>
<td></td>
<td>Basic Obstetric Ultrasound - 1 block</td>
<td>Basic Surgical Skills Course</td>
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<tr>
<td></td>
<td>Birth Spacing /Family Planning Clinic - 1 block</td>
<td>Neonatal Resuscitation Course (Provider’s)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emergency Medicine - 1 block</td>
<td>Basic Surgical Skills Course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Research - 1 block</td>
<td>Basic Surgical Skills Course</td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td>Gynecologic Pathology - 1 block</td>
<td>Evidence Based Medicine course</td>
<td>End of Year Exam (MCQ &amp; OSCE)</td>
</tr>
<tr>
<td></td>
<td>Research - 1 block</td>
<td>Commencement of Research Project</td>
<td>Research Project – R4/ R5</td>
</tr>
<tr>
<td></td>
<td>Basic Obstetric Ultrasound - 1 block</td>
<td></td>
<td>Recommended Arab Board part 2</td>
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<tr>
<td></td>
<td>Genetics - 1 block</td>
<td></td>
<td>Optional Part 2</td>
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<tr>
<td></td>
<td>General Obstetrics - 5 blocks</td>
<td></td>
<td>MRCOG</td>
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<tr>
<td></td>
<td>General Gynecology - 3 blocks</td>
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<tr>
<td>Year 4</td>
<td>Rotation Abroad:</td>
<td></td>
<td>End of Year Exam (100 MCQs)</td>
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<tr>
<td></td>
<td>Maternal Fetal Medicine - 3 blocks</td>
<td></td>
<td>OSCE</td>
</tr>
<tr>
<td></td>
<td>Reproductive Medicine / Infertility - 3 blocks</td>
<td></td>
<td>Recommended MRCOG/ MRCPI /Arab Board Part 2</td>
</tr>
<tr>
<td></td>
<td>Gynecological Oncology - 3 blocks</td>
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<tr>
<td></td>
<td>Urogynecology - 3 blocks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 5 &amp; 6</td>
<td>Obstetrics Senior Rotation - 4 blocks</td>
<td>Management Course Administration training</td>
<td>Completion of Credentialing of Surgical and obstetric Procedures</td>
</tr>
<tr>
<td></td>
<td>Gynecology Senior Rotation - 4 blocks</td>
<td>Part 2 OMSB Exam Clinical Exam OSCE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Research - 1 Block</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Selective Rotations by Residents - 3 blocks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Throughout Practicing Career</td>
<td></td>
<td>Approved professional development program</td>
<td>Part 2 MRCOG/Arab Board</td>
</tr>
</tbody>
</table>
5.5 Academic Activities/ Teaching Methods
Residents have protected teaching hours every Monday afternoon 2:00 – 5:00 pm. The formal teaching schedule is prepared in a two-year cycle. Teaching involves:

- Case presentations by residents
- Didactic Lectures
- Simulation Activities
- Drills
- Journal Clubs

Other teaching activities include:
- Mortality and Morbidity Meetings
- Departmental Meetings
- Perinatal Statistics Meetings
- Fetal Medicine Rounds
- Grand Rounds

5.6 Simulation Learning
Simulation activities are integrated into the formal teaching methods of residents. These may use low or high fidelity models. These activities include:

- Basic Life Support (BLS)
- Advanced Cardiac Life Support (ACLS)
- Basic Surgical Skills Course (BSSC)
- Obstetric Emergency Drills
- Hysteroscopy operative and diagnostic
- Laparoscopy operative and diagnostic
- IUCD insertion
- CTG workshop
- Ultrasound workshop
- Critical Care in Obstetrics
- Crisis Management in Maternity ward

5.7 Examination Requirements
a) The examination will be held at the end of every academic year.
b) Re-evaluation examination will be held within a month after the announcement of the results.
c) The number of attempts allowed for examination are as per OMSB regulations.
d) Residents must appear for the Part 1 OMSB exam at end of 2nd year and Part 2 at the end of 5th year.
e) CREOG in January of each year (Compulsory for all residents R2 and above)
Examinations Outline

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Exams</th>
</tr>
</thead>
</table>
| R1   | End of Year Exam (100 MCQs)  
Log Book Assessment |
| R2   | End of Year Exam (100 MCQs)  
Part 1 OMSB Exam  
OSCEs  
Recommended MRCOG/MRCPI/Arab Board Part 1 |
| R3   | End of Year Exam (100 MCQs)  
OSCE |
| R4   | End of Year Exam (100 MCQs)  
OSCE  
Recommended MRCOG/ MRCPI /Arab Board Part 2 |
| R5 & R6 | Part 2 OMSB Exam  
Clinical Exam  
OSCE |

5.8 Log book/Portfolio

The logbook is an essential method for assessing the resident’s progress and graded responsibilities during their training years.

In the logbook there is a comprehensive description of the minimum number required of the most common obstetric and gynecologic procedures.

The decision to allow the trainee to perform procedures independently will depend on the supervisor’s assessment of the individual’s skills and not necessarily on the number of procedures observed / assisted. The residents Level of Competency in every procedure is based on the following:

Level 1: Assistant Status  
Level 2: Needs Direct Supervision  
Level 3: Indirect Supervision  
Level 4: Competent Unsupervised

All residents are expected to get signatures of their supervisors to decide their level of competence. In addition to this certification of satisfactorily completing the logbook has to be signed by the resident’s supervisor and then countersigned by either the program director or the chairperson of the education committee. This should be done during six months or annual evaluations.

Logbook help in assessing resident’s training as a simple system for recording the acquisition of clinical skills. In the logbook for each procedure there are specific training targets and the final level of competence is reached in stages, ranging from assistant status, direct supervision, indirect supervision and ultimately being competent unsupervised.
Level 1: Observation / Assistant Status
Prior to undertaking any clinical skill under direct supervision the resident must have observed the procedure on a number of occasions, have a thorough understanding of the principles of the procedure, the indication for the procedure and the complications. Once these skills have been obtained, the relevant competency box should be signed and dated and can then move on to performing the procedure under direct supervision.

Level 2: Direct Supervision
The time taken to acquire the necessary skills under direct supervision will depend on the complexity of the procedure and the resident aptitude for it. There is therefore no limit to the number of times the procedure needs to be supervised. Until clinical supervisor is certain that resident can safely perform the procedure in a number of different clinical situations and levels of complexity, the resident will perform the procedure under supervision.

Level 3: Indirect Supervision
Once the resident have been signed off for direct supervision they should start the process of performing procedures with less and less supervision as agreed by their trainer. The resident should only be signed off for independent practice when they and their trainer are confident that they can perform the procedure efficiently independently.

Level 4: Competent Unsupervised
Once the resident and the trainer is confident performing procedures independently and are considered competent they perform procedures unsupervised. Once this competency has been attained the resident must keep a detailed record of the procedures they perform and complications if any.

5.9 Assessment and Feedback
Resident performance will be assessed throughout her/his tenure in the training program to ensure appropriate development of skills and competencies. Methods used will provide assessment of competencies in patient care, medical knowledge, and practice based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice. Evaluation of resident performance on each rotation will address each of these areas as appropriate while addressing the specific learning objectives of the rotations. The residents are specifically evaluated on the following competencies:

- **Patient Care**: caring and respectful behaviors, interviewing, develop and carry out patient management plans, counsel and educate patients, medical procedures, and ability to work within a team.
- **Medical Knowledge**: investigatory and analytic thinking, knowledge and application of basic sciences.
- **Practice-Based Learning and Improvement**: analyze own practice for needed improvements, use of information technology, and facilitate learning of others.
- **Interpersonal and Communication Skills**: creation of therapeutic relationship with patients, listening skills.
- **Professionalism**: respectful, altruistic, ethically sound practice, sensitive to cultural, age, gender, liability issues.
- **Systems-Based Practice**: understand interaction of their practices with the larger systems, practice cost-effective care, advocate for patients within the health care system.

5.9.1 Methods of Evaluation

- **In-Training Evaluation Report (PC,MK,PBLI,ICS,P,SBP)**
  Residents will be evaluated by appropriate faculty members during and at the end of each assigned rotation. These evaluations will be based on the objectives for that assignment and appropriate to the level of the resident. Appropriate feedback is given throughout the rotation as needed and the evaluation is discussed with the residents at the end of the rotation. Completed evaluations will be forwarded to the program director to be used in the semi-annual evaluation meeting.
  The resident’s admission notes, progress notes & discharge summaries in wards and outpatient notes will be reviewed randomly by faculty. Feedback can be given to the resident with regards to the quality of their written notes and faculty has a direct opportunity to continuously evaluate resident performance.
  The communication skills of a resident in Obstetrics & Gynecology must be both verbal and written. Verbal communication skills and clinical skills of the residents are evaluated on a daily basis when residents discuss cases with faculty in outpatient department or in ward and suggestions made when appropriate.

- **Global and 360-Degree Evaluation (ICS, P)**
  This form is completed by attending faculty who have interacted with the resident, peer residents, midwives and nurses. A minimum of eight evaluations are done at a time and these are required to be done at least 4 times in the academic year. These evaluations are expected to cover resident's attitude to both staff and patients, their reliability and punctuality, their communication skills, honesty, integrity, leadership skills and professional development skills.
  The faculty assess the attitudes of the residents while on duty and during discussions regarding patient management. When appropriate, these attitudes are discussed within the context of the Clinical Competence Committee. Any perceived problems, should be discussed directly by supervising faculty with the Program Director or Chairman.

- **Mini- Clinical Evaluation Exercise (MINI-CEX) (PC,MK,PBLI,ICS,P,SBP)**
  This tool tests many different and varied competences and is a generic tool. Indicated in the curriculum are the competencies that can be tested using this tool.
  This tool enables the trainer to directly observe and assess the resident in the process of history taking, clinical examination, formulating management plans and communicating with patients. It also assesses the professional and interpersonal skills. The mini-CEX is designed to take about 15-20 minutes and feedback is given immediately to the
resident. A minimum of 4 MINI-CEX, with different trainers must be satisfactorily completed per year.

- **Presentation Evaluation (MK, ICS)**
  The residents are expected to facilitate their learning by taking active part in their tutorial sessions with Faculty. The residents will be preparing topics allocated to them by the teaching faculty as per their curriculum in different years of training. Their presentation should include - a plan of the session, incorporating aims & objectives, material and structure. The conduct of the session will be observed by the faculty and feedback given. Residents are expected to complete at least four evaluations per year. Evaluations are aimed at assessing the resident’s presentation skills, use of appropriate teaching methods, medical knowledge, competency in practice-based learning and discuss alternative management options. These evaluations also cover journal club presentations, where the assigned resident reviews a significant article in terms of statistics and relevance to current practice.

- **Evaluation of procedural skills (PC,MK,PBLI)**
  This form is completed by the resident’s direct supervisor, and allows the resident an opportunity to assess her/his goals, strengths, and areas for improvement in all procedures performed through focused evaluations. A minimum of 4 evaluations on all different procedures are recommended. These evaluations are reviewed at 6 months and at the end of the year to enable progress in residency and successful progression in graded responsibility. This is done along with the assessment of the resident’s log book (details to follow).

5.9.2 Faculty Evaluation
Residents evaluate all concerned trainers at the end of each rotation. The data is collated by the program coordinator and sent to the program director after ensuring anonymity of the residents. The program director then presents the collective evaluation to the concerned trainers. This process contributes towards improving and maintaining effective teaching standards.

5.10. Progression Criteria
To progress to the next postgraduate year, residents are expected to achieve the goals and objectives of the current post graduate year. The residents must satisfactorily complete the scheduled rotations and pass the required assessments and examinations. If the resident is not progressing as expected, the Clinical Competence Committee will develop an action plan to address the deficiencies using the appropriate institutional policies and procedures as per by laws of OMSB. The program director will communicate this action plan to the resident. If the resident is to be placed on probation, appropriate written notification, in compliance with institutional policies, will be provided.
5.11 **Quality Assurance**  
As per OMSB guidelines

5.12 **Patient and Resident Safety**  
As per OMSB guidelines

5.13 **Research Requirements**  
During the residency training program, the resident is required to complete at least one study (preferably prospective) which addresses an issue of relevance to the specialty.

5.14. **Outcome Measures and Exit Qualifications**

5.14.1 **Exit Criteria and “Completion of Training Certificate”**  
Residents graduate when they have satisfactorily met all the requirements for successful completion of the residency training program, and once they have demonstrated sufficient professional ability to practice competently and independently and safely.

5.14.2 **Exit Qualification**  
Exit Qualification - Member of OMSB as per OMSB by-laws (Passing OMSB Part II Examination)

6. **Faculty**

6.1 **Members of the Teaching Faculty**

**Obstetrics and Gynecology Residency Training Program**

<table>
<thead>
<tr>
<th>NAME</th>
<th>HOSPITAL</th>
<th>QUALIFICATIONS</th>
<th>POST</th>
<th>TRAINER CATEGORY</th>
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<tr>
<td>Dr. Bernadette Punnoose</td>
<td>Royal Hospital</td>
<td>MD, MRCOG. FAMS</td>
<td>Sr. Consultant</td>
<td>Full-Time Trainer</td>
</tr>
<tr>
<td>Dr. Chitra Jha</td>
<td>Royal Hospital</td>
<td>MBBS, DGO, MRCOG</td>
<td>Sr. Consultant</td>
<td>Full-Time Trainer</td>
</tr>
<tr>
<td>Dr. Seerat Minocha</td>
<td>Royal Hospital</td>
<td>MBBS, MD, MRCOG</td>
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<td>Full-Time Trainer</td>
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<tr>
<td>Dr. Badriya Al Fahdi</td>
<td>Royal Hospital</td>
<td>MD, MRCOG (UK)</td>
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<td>Full-Time Trainer</td>
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<tr>
<td>Dr. Jayasree Santosh</td>
<td>Royal Hospital</td>
<td>MD, MBBS, DGO, DNB</td>
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<tr>
<td>Dr. Khalsa Al Hattali</td>
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<td>MD, MRCOG, Fellowship in IVF</td>
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<td>Full-Time Trainer</td>
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<td>Dr. Mary Jacob</td>
<td>Royal Hospital</td>
<td>MBBS, DGO, MD</td>
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<td>7</td>
<td>Dr. Nalini Mohan</td>
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<td>DNB, MBBS</td>
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<td>Dr. Roshina Khan</td>
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<td>MD, MRCOG</td>
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<td>Dr. Shaikh Julie Samiuddin</td>
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<td>MD, FRCSC</td>
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<td>18</td>
<td>Dr. Sumita Datta</td>
<td>Royal Hospital</td>
<td>MD, MBBS, MRCOG, CCST (UK)</td>
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<td>19</td>
<td>Dr. Sura Abboud</td>
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<td>11</td>
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<td>MBBS, FCPS (Obstetrics and Gynaecology)</td>
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<td>BSc in Biology, MD</td>
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<td>20</td>
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<td>Higher Specialization in OBGYN, Jordan Board of OBGYN</td>
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<td>Dr. Rula Eskander</td>
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<td>45</td>
<td>Dr. Vidya Kishore</td>
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<td>MBBS, MD, MRCOG (UK), FMAS (India), Dip MIS (Germany), Fellowship in Urogynecology (India)</td>
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<td>48</td>
<td>Dr. Ilham Hamdi</td>
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<td>Dr. Geeta Zunjurwad</td>
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<td>Dr. Hansa Dhar</td>
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<td>Jr. Specialist</td>
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<td>56</td>
<td>Dr. Sheikha Al Jabri</td>
<td>Sohar Hospital</td>
<td>BSc, MD, FRCPS, Fellowship - Minimal Invasive Gynecology Endoscopy</td>
<td>Sr. Consultant</td>
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6.2 Qualifications and Functions

6.2.1 Generic Selection Criteria for Appointment of Physician Trainers
(Please refer to OMSB Trainers Manual 4th Edition page 22)

6.2.2 Responsibilities of Trainers & Associate Trainers
(Please refer to OMSB Trainers Manual 4th Edition page 28)
7. Trainees

7.1. Support Services
- OMSB residents’ telephone helpline 24181114
- Email Address - residentservice@omsb.org
- OMSB residents’ helpdesk – OMSB Headquarters, Public Services Department, 6th Floor C.
- Office Hours - (7:30 am -2:30 pm) from Sunday to Thursday

7.2. Resident Performance and Well-being
(Please refer to OMSB Resident Manual 6th Edition page 40)

7.3. Resident Grievance Policy
(Please refer to OMSB Resident Manual 6th Edition page 36)

7.4. Remedial Plan
(Please refer to OMSB Resident Manual 6th Edition page 30)

8. Educational resources

8.1. Training Centers, Facilities and Resources
Sultan Qaboos University Hospital - https://www.squh.edu.om/

8.2. Clinical Teaching Facilities
Each training centers provides clinical teaching facilities to the residents during their rotations in different subspecialties.
Details are available for reference on the respective websites as mentioned above.

8.3. Information Resources and Library Services
All main training centers provides Wifi internet services for residents and have e-library services.
Details are available for reference on the respective websites as mentioned above.