GOALS AND OBJECTIVES

OB/GYN RESIDENCY PROGRAM

THOMAS JEFFERSON UNIVERSITY HOSPITAL
# OVERALL EDUCATIONAL GOALS

## PGY 4

<table>
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<th>Category</th>
<th>Requirements</th>
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<tr>
<td><strong>Medical Knowledge</strong></td>
<td>All residents must demonstrate evidence of preparation and retention of information, regular attendance and participation in scheduled educational conferences, and acceptable CREOG examination performance. A resident scoring 2 standard deviations below the mean on the exam must undergo remediation and directed reading. The resident must be familiar with basic textbook level knowledge and begin to use journal articles. The resident must demonstrate a complete understanding of basic science and of clinical management issues within the areas of ob/gyn. The resident must demonstrate a thorough knowledge of surgical anatomy, and details of complex general operative techniques and obstetrical procedures. The resident must demonstrate extensive familiarity with the literature and with current clinical advances.</td>
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<tr>
<td><strong>Patient Care</strong></td>
<td>The resident must demonstrate proficiency in all aspects of his/her clinical management skills. The resident must be able to function independently to make an accurate pre-operative assessments, decide when to operate, which operation to perform, and to provide appropriate post-operative management of patients -- during both the acute inpatient and the chronic outpatient phases of treatment. The resident must be able to supervise a busy labor and delivery suite and perform the necessary procedures. The resident must be able to independently manage the breadth of office practice, with supervision.</td>
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<tr>
<td><strong>Surgical Skills</strong></td>
<td>The resident must demonstrate mastery of basic and advanced surgical skills, as well as a developed sense of surgical judgment -- understanding when and how to safely proceed with an operation. The graduating resident must demonstrate the ability to safely perform complex operations with a minimum of prompting by the attending physician. They should be able to teach uncomplicated procedures to junior residents.</td>
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<tr>
<td><strong>Professionalism</strong></td>
<td>The resident must continuously demonstrate the attributes of reliability, integrity, honesty, altruism, respect, and compassion. The resident must demonstrate an appropriate attitude regarding commitment to excellence and learning, and to patient care. The resident must be open to constructive criticism and improvement. The resident must complete statistics, duty hours logging and medical records on time.</td>
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<tr>
<td><strong>Communication</strong></td>
<td>The resident must show consistent effort and success in overseeing and teaching medical students and junior residents. In addition, in his/her role as chief resident on a service, he/she must also ensure that adequate time is spent teaching during rounds and that the residents and students prepare for and attend all appropriate conferences and educational activities.</td>
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<tr>
<td><strong>Systems Based Practice</strong></td>
<td>The resident must demonstrate the ability to practice in a cost-effective manner. In addition to other, the resident must complete a systems based Grand Rounds in obstetrics and gynecology. They must be familiar with billing and insurance issues.</td>
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<tr>
<td><strong>Practice-Based Learning</strong></td>
<td>In addition, the residents must complete and present their research at Resident Research Day. They must lead teaching on their service.</td>
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Goals and Objectives for PGY 4

1. Genomics

The rapid growth and clinical adaptation of genetically based information and technology are fundamentally changing the practice of medicine in general and obstetrics and gynecology in particular. The impact of these changes overarch the traditional divisions used in past editions of the CREOG Educational Objectives, and hence this supplement.

I. Core Competencies

The application of genomic information and technologies must be carried out under the general umbrella of the ACGME core competencies (see Unit 1). Residents are expected to:

A. Demonstrate caring and respectful behaviors when dealing with the genetic information of patients and their families.
B. Discuss the ethics of genetic testing in obstetrics and gynecology.
C. Discuss the role of other (specialized) health care professionals in the development of genetic information and testing that is used in the clinical setting.

II. Objectives: Competency: The resident shall research and study, through use of the assigned textbook, reprints, and the Internet (System Based Practice) each of the following topics on a weekly basis, then demonstrate her/his knowledge by appearing on time at the Attending Physician’s office prepared to discuss each topic in detail (Professionalism; Communication).

A. Primary and Preventive Ambulatory Health Care (Week 1)

The setting of primary health care services provides a number of opportunities to apply the growing body of information available from genomics and genetically based technologies. From the assessment of breast cancer risk through the use of a directed family history and selected testing of specifically associated gene variations to the use of gene-based technology to assess the risk of cervical cancer or detect sexually transmitted disease, genomics has altered primary and preventive care.

1. Competencies:
   a. Medical Knowledge:
      (1) Describe the general indications for genetically based diagnostics.
      (2) Perform or interpret genetic risk assessment through the following:
         i. Pedigree analysis
         ii. Gene testing
            a. Antenatal
            b. Adult
(3) Describe the sensitivity and specificity of various genetic tests and the implication of these parameters in clinical practice.

(4) Describe the role of genetics in drug metabolism and individual variation in drug efficacy.

(5) Discuss the factors involved in the development of and recommendations for genetic testing, such as:

1. Frequency of the condition in the population
2. Nature and range of severity of the condition
3. Treatment, intervention, and/or prevention
4. Reproductive options to avoid or reduce risk
5. Test availability, including prenatal screening and/or diagnostic testing
6. Sensitivity, specificity, and positive predictive value of the test
7. Genotype-phenotype correlation
8. Frequency of gene mutation in general population or selective subgroups (based on ethnicity/race)
9. Cost and cost-effectiveness of screening
10. Usefulness of test information to individual, to family and to society
11. Availability of public and professional educational material/programs
12. Availability of adequate genetic counseling services for follow-up
13. Potential for uncertainty of tests results
14. Potential for psychologic, emotional, or physical harm to patient
15. Potential for misuse of information and genetic discrimination

(6) List the types of chromosomal abnormalities that may result in clinically significant abnormalities, such as:

1. Deletions
2. Additions
3. Trinucleotide repeats
4. Microsatellite instability
5. Mitochondrial DNA abnormalities

(7) Discuss the technology, applications, and limitations of microarrays comparative genome hybridization (CGH), and proteomics.

III. Obstetrics (weeks 2 & 3).

The passage of genetic information from one generation to the next is the ultimate demonstration of genomics in action.
Competency: Patient Care: The obstetrician must understand genetics and genomics and should use this information for the good of the patient, her family, and her unborn child.

Competency: Medical Knowledge

A. Basic mechanism of genetic inheritance

1. Describe the basic structure and replication of DNA.
2. Describe the processes of mitosis and meiosis.
3. Describe common terms associated with genetic expression, such as:
   a. Exon
   b. Intron
   c. Codon
   d. Transcription
   e. Translation
4. Describe the clinical significance of karyotype abnormalities, such as:
   a. Trisomy
      1. 13
      2. 18
      3. 21
   b. Polyploidy
   c. Monosomy
   d. Sex chromosome abnormalities
   e. Deletions
   f. Inversions
   g. Translocations
   h. Mosaicism
   i. Chimeras
5. Describe the normal process of gametogenesis
6. Describe the normal process of fertilization and the combination of genetic information.

B. Clinical implications of heritable disease

1. Describe the clinical significance of heritable diseases, such as cystic fibrosis, Tay-Sachs disease, sickle cell disease, Fragile X syndrome, thalassemia, and hemophilia.
2. Counsel patients about the techniques for and implications of testing for heritable diseases.
3. Discuss treatment and surveillance options for patients or newborns with genetically derived disease.

C. Genetic counseling

1. Competency: Practice Based Learning: The resident shall elicit a history for inherited disorders, ethnic- or race-specific risks, and teratogen exposure.
Competency: Medical Knowledge:

2. Describe the concepts of penetrance and variable expression and their impact on prognosis for a given genetic disorder.

3. Distinguish between various forms of genetic inheritance, such as:
   a. Autosomal dominant
   b. Autosomal recessive
   c. X-linked
   d. Mitochondrial DNA abnormalities
   e. Genomic imprinting

4. Counsel patients about the manifestations of common genetic disorders

5. Describe the indications of and limitations of noninvasive diagnostic tests for fetal aneuploidy and structural malformations (eg, ultrasonography, serum analytes).

6. Discuss ultrasonography findings that are often associated with genetic disorders, such as:
   a. Duodenal atresia
   b. Omphalocele
   c. Nuchal lucency
   d. Heart defects
   e. Diaphragmatic hernia
   f. Cerebral Ventriculomegaly

7. Counsel patients about the risks and benefits of various methods of invasive fetal testing, such as:
   a. Chorionic villus sampling
   b. Amniocentesis (Competency: Patient Care: The resident will assist and/or perform a genetic amniocentesis.)
   c. Cordocentesis
   d. Preimplantation genetic testing

Competency: System Based Practice:

8. Order and interpret appropriate maternal and fetal/neonatal tests to evaluate possible causes of fetal demise.

Competencies: Professionalism, Communication, and Practice Based learning:
The resident shall:

9. Counsel a patient with an abnormal fetus regarding management options.

10. Counsel a patient and her family after adverse pregnancy outcome about such factors as recurrence, future care, and possible interventions.

11. Counsel a patient and other health care professionals about fetal effects of indicated diagnostic studies utilization ionizing radiation.

12. Counsel a patient about the genetic implications of advancing maternal and paternal age.
Competency: Medical Knowledge:

D. Describe the indications and uses for umbilical cord stem cells. Counsel patients on the advantages and disadvantages of umbilical cord blood banking.

IV. Gynecology (Week 4)

The rapidly growing developments in the fields of genetics and genomics also have had an impact on the practice of gynecology.

Competency: Medical Knowledge:

A. Basic mechanism of genetic inheritance
   1. Describe the inheritance of hemoglobinopathies.
   2. Summarize the genetic basis for hereditary cancer syndromes in women such as:
      a. Breast cancer
      b. Colon cancer
      c. Ovarian cancer
      d. Endometrial cancer
   3. Describe the implications of the integration of viral genetic information into normal cervical cells.

   4. Clinical implications of genetic inheritance
      1. Describe the role of genetics in the following:
         a. Spontaneous abortion
         b. Recurrent abortion
         c. Uterine leiomyomata

V. Reproductive Endocrinology (Week 5).

Much of the processes related to reproductive endocrinology are directly or indirectly related to the biologic imperative to pass on genetic material.

Competency: Medical Knowledge

A. Basic mechanism of genetic inheritance
   1. Describe the genetic basis of the following conditions:
      a. Normal and abnormal Mullerian development
      b. Disorders of androgen excess
      c. Repetitive pregnancy loss
      d. Ambiguous genitalia
   2. Describe the principles of preimplantation genetic diagnosis.
   3. Discuss Mendelian and non-Mendelian patterns of inheritance:
      a. X-linked conditions
      b. Autosomal recessive and dominant conditions
c. Imprinting
d. Trinucleotide repeat expansions
e. Mitochondrial DNA abnormalities

B. List the role of genetics in the development and evaluation of infertility

1. Male
   a. Klinefelter’s syndrome
   b. Congenital vas deferens absence and azoospermia
   c. Y-chromosome deletions

2. Female
   a. Age-related aneuploidy
   b. Diminished ovarian reserve

C. Discuss the role of genetics in the timing of both normal and abnormal menopause.

VI. Oncology (Week 6).

Our understanding of malignancy and its treatments has been fundamentally altered by developments in the fields of genetics and genomics.

Competency: Medical Knowledge:

A. Basic mechanism of genetic inheritance
   1. Describe the clinical relevance of viral and other oncogenes.
   2. Describe the inheritance patterns for malignancies of the pelvic organs and breast.
   3. Describe the current indications for screening for BRCA1 and BRCA2.
   4. Describe the cell replication cycle and identify the phases of the cycle most sensitive to radiation and chemotherapy.
   5. Describe the association of other mutations, such as p53 and PTEN mutations, with other cancer syndromes.

B. Embryology and developmental biology
   1. Describe the embryology of gonadal migration and its role in the pathogenesis of epithelial and germ cell neoplasms.
   2. Describe the embryologic origins of cell types found in benign and malignant germ cell tumors.

C. Epidemiology and risk assessment of gynecologic cancer.
   1. Competency: Patient Care; Practice Based Learning:
      Evaluate a patient’s personal or family history of breast cancer, including the risk associated with BRCA2 or BRCA2.
Competency: Medical Knowledge:
   2. Describe the inherited syndromes that increase a woman’s likelihood of developing ovarian cancer.
   3. Discuss the genetics of familial syndromes (eg, hereditary nonpolyposis colorectal cancer [Lynch II]).
   4. Describe the screening protocols that may identify patients who have an inherited form of ovarian cancer.
   5. Describe the epidemiology and genetics of hydatidiform mole.

By the completion of this curriculum in Ob/Gyn Genomics (Goal), the resident will have demonstrated her/his knowledge and abilities of the listed topics (Objectives) by use of all of the Core Competencies. Satisfactory completion of this course is verified by the resident and faculty:

2. Gynecology

The rotation shall consist of 6-7 weeks at TJUH. The resident will manage the inpatient service including assignment of surgical cases to the members of the team, supervise and perform inpatient consultations from other services, supervise and perform consultations and admissions from the Emergency Department, teach junior residents and students, and management of the JOGA preoperative clinic.

Goals:

1. Development of judgment in selecting and performing appropriate surgical care of common gynecologic problems (MK,PC,PBL)

2. Refine surgical skills in performance of advanced surgical procedures (PC)

3. Develop strategies for supervising and teaching clinical care and surgical skills to junior residents (PC,C)

4. Develop ability to serve as a consultant to other specialties, including the ability to utilize evidence-based medicine in making recommendations (SBP,C,PBL)

5. Efficient and effective triage of gynecologic problems seen in the emergency room setting (PC)

6. Evaluation of patient outcomes and complications seen during the rotation and presentation in a Grand Rounds Setting (C, PBL,SBP)

7. Familiarity with quality assurance methodology and utilizing it to perform a presentation of a systems – based problem identified on their rotation. (SBP)
**Objectives:** In addition to the objectives listed for PGY 1, 2 and 3 rotations, by the end of this rotation PGY 4 residents must be able to:

1. Conduct detailed preoperative assessment with consideration given to the needs of special patient groups such as children and adolescents, geriatric patients, and medically complex patients. (PC, MK, C)

2. Perform the following procedures with minimal supervision: uncomplicated abdominal and vaginal hysterectomy; laparoscopic surgery for ectopic pregnancy; myomectomy (PC)

3. Demonstrate the ability to supervise, direct and teach the members of the inpatient team and interact effectively with ancillary nursing and operating room staff (P, C, SBP)

4. Analyze and present the patient outcomes from their rotation at a Grand Rounds along with a systems based problem they identified (may also be done on OB rotation) (C, SBP, PBL)

**Evaluation methods:**

Global evaluation
Surgical checklist cards
Mini-cex
Evaluation by junior residents
Evaluation of presentation at Grand Rounds

**Reading:**

Assigned articles on gyn topics in binder

**3. Colposcopy Clinic**

**Description of the clinical experience:**
Colposcopy clinic occurs weekly in the resident clinic. The PGY 2 and PGY 4 from the gyn-oncology rotation are responsible for managing the patients who are referred due to their abnormal pap smear results. The residents obtain a relevant clinic history and review the type of abnormal pap smear result to understand the risk factors associated with HPV mediated infections, and perform colposcopic examination.

**Goals:**

1) Understand the pathophysiology and natural history of lower genital tract neoplasia, including HPV infection
2) Perform adequate colposcopic exam and biopsies of the lower genital tract.
3) Manage patients with lower genital tract neoplasia following evidence-based guidelines
4) Develop familiarity with an organized system of management that addresses the medio-legal aspects of diagnosing, treating, communicating and tracking patients with cervical precancer and cancer.
5) Perform procedures and surgeries necessary to treat cervical precancer and cancer.
6) Understand the socio-economic barriers to care that limit access to correct treatment.

Objectives: Upon Completion of the rotation, the resident must be able to:

1) Obtain a relevant history regarding HPV infection and abnormal pap smears. (PC, C)
2) Understand the history and clinical risk factors likely to contribute to abnormal pap smears. (MK)
3) Describe the techniques, laboratory processing and reporting system for lower genital tract cytology. (MK, SBP)
4) Utilize the algorithms defined by ACOG and ASCCP for management of patients with an abnormal pap smear. (PC, MK, SBP)
5) Demonstrate proficiency in colposcopic examination of the cervix, vulva and vagina, including positioning, magnification, focusing of the colposcope, use of green filter, solutions, and documentation of the findings (PC, C)
6) Develop proficiency in surgical treatment including LEEP, cold knife conization, vaginectomy, laser therapy and medical therapy. (PC)
7) Provide patient education and support (P, C).
8) Perform quality assurance measures. (P, SBP, PBL)

Reading Assignments:
   a) Colposcopy, Principles and Practice, 1st edition (selected chapters)
      Chapter 3- The Papanicolaou Smear,
      Chapter 5- Principles and Technique of the Colposcopic Exam,
      Chapter 9- Colposcopic Assessment System,
      Chapter 20- Triage of the Abnormal Pap Smear and Colposcopy in Pregnancy,
      Chapter 25- Management Scenarios
   b) Gynecology, Droegmueller (selected chapters)
   c) Clinical Gynecologic Oncology, Desaia and Creaseman (selected chapters)


Evaluation Process:
   1) Global rotational evaluation
   2. Surgical checklists.
   3) Performance on selected cases from interactive CD Rom
   4) Online ASCCP exam
4. Family Planning /Ambulatory Care Continuity Clinics

The Family Planning and Ambulatory Clinics take place in the Jefferson Obstetrics and Gynecology Associates clinic. All residents will see patients with contraceptive needs, routine annual evaluations, uncomplicated obstetric and postpartum patients and patients with gynecologic complaints, appropriate to their level of training. PGY-1 residents have clinic with an emphasis on Family Planning during the ICN, Anesthesia, Emergency Medicine, Ultrasound, Family Medicine West Jersey OB and Gyn rotations as well as during a dedicated 2 week block. All others will have one half day per week during specified rotations for a total of 30 months of continuity clinic.

The aims of the rotation are to prepare residents to provide outpatient patient care and counseling that is compassionate, appropriate and effective for the treatment of outpatient reproductive and basic primary care problems. The rotation will provide opportunities for residents to master clinical skills including antepartum care, contraceptive counseling, pregnancy options counseling, manual vacuum aspiration, transvaginal ultrasound, and permanent and long-acting reversible contraceptive methods (LARC). In addition, residents will learn the scope of outpatient gynecologic care in a graduated fashion. Lastly, they will provide primary and preventive care screening for their patients of all ages, including those related to general health maintenance.

Goals:

1. Residents will develop the knowledge, skills and attitudes to manage common ambulatory problems related to the female reproductive system including abnormal bleeding, pelvic floor disorders, and pelvic pain.(MK, PC, P, C)

2. residents will develop the ability to provide comprehensive, non-directive contraceptive counseling and provision to women at all stages of their reproductive careers, including the knowledge of contraceptive devices and the ability to serve as a consultant for management of complex cases. This includes knowledge of method effectiveness and user effectiveness, national and local policies that affect control of reproduction, how religious, ethical and cultural differences affect providers and users of contraception, the impact of contraception on population growth in the United States and other nations, factors that influence the individual patients choice of contraception, and the advantages, disadvantages, failure rates and complications associated with all methods of contraception, including post-coital methods.(MK,PC,P,C,SBP)

3. residents will recognize and manage the symptoms of menopause, understand the health implications of menopause and its treatment, and counsel patients effectively on these issues.(MK, PC, C)

4. residents will be familiar with evidence based screening recommendations for female patients at all stages of the life cycle. They will be familiar with techniques to effectively counsel on and encourage healthy lifestyles in their patients.(MK,PC, C, SBP)
5. Residents will develop the ability to manage the outpatient aspects of uncomplicated pregnancies and the post-partum state. They will understand the ambulatory management of pregnancy-related issues, including standard diagnostic tests, common complaints and complications. (MK, PC)

6. Residents will understand the impact of patients’ insurance status and the local health care system on the care of their patients, and will develop the knowledge to adequately code and bill visits, obtain consultant services for their patients, prescribe medications and contraceptives, and arrange diagnostic testing for their outpatients in the clinic. They will learn about community-based resources which may be available to augment various aspects of patient care, and how to help patients access such facilities (PC, SBK).

Objectives: Upon completion of these rotations, the resident will be able to:

1. Perform a complete and comfortable breast and pelvic examination (PC, C)

2. Demonstrate the ability to communicate successfully with the patient so as to obtain both a problem-specific and annual history (C, PC)

3. Perform routine ambulatory procedures, including Pap smears, wet preps, manual vacuum aspiration, endometrial and vulvar biopsy and insertion of intrauterine devices and implantable contraceptives (PC)

4. Counsel a patient on medical and surgical options for elective termination of pregnancy, describe the state-specific regulations concerning abortion, the risks benefits and alternatives of the procedure and arrange for performance of the procedure at our institution or with local providers, regardless of personal beliefs. (MK, PC, P, C, SBP)

5. Describe the available forms of hormonal and non-hormonal contraception, including long-acting reversible contraception, male and female sterilization, and barrier methods; counsel a patient on the advantages, disadvantages and contraindications of each method; and perform insertion of IUD, implantable rods, and diaphragm fitting in the office. (MK, PC, C)

6. Prescribe medical and behavioral therapies for the management of menopausal symptoms, including the advantages and contraindications of each. (MK, PC)

7. Perform an evaluation of a patient with urinary incontinence and prolapse, including a history of related symptoms, a cough stress test, and a POP-Q examination (MK)

8. Complete five annual examinations every 6 months that pass the criteria for age – specific annual examination, as documented by checklist. (MK, SBP)

9. Perform an initial obstetrical visit, with complete documentation as reviewed by staffing attending physician, including a comprehensive history and physical examination, ordering routine laboratory tests and those required because of risk factors during pregnancy,
counseling patients about lifestyle modifications that improve pregnancy outcome, counseling patients about warning signs of adverse pregnancy events, appropriate immunizations, and the benefits of breast feeding. (PC)

10. Generate a complete and accurate medical record, electronic or paper, that can be accurately interpreted by others (SBK,C). Demonstrate the ability to use the electronic medical record for the retrieval of patient information, adding diagnostic and therapeutic data, and prescribing, with reference to insurance status. (SBP, PBL).

11. Demonstrate the ability to use electronic media at the point of care for consultation of the medical literature. (SBK)

12. Demonstrate the ability to diagnose, treat and counsel patients with a sexually transmitted infection, vaginal or vulvar infection. This includes describing the principal infections that affect the vulva and vagina such as candidiasis, bacterial vaginosis, and trichomoniasis, chlamydia, gonorrhea, syphilis, hepatitis B and hepatitis, human immunodeficiency virus (HIV), herpes simplex and human papillomavirus; performing a focused physical examination; performing and interpreting tests such as vaginal pH, saline microscopy, potassium hydroxide microscopy, bacterial and viral tests; and familiarity with the CDC recommended regimens for treatment of STI. The resident should describe the follow up that is necessary for a patient with a vulvar or vaginal infection, including assessing and treating sexual partner(s), reporting requirements, and counseling the patient about prevention of re-infection. Finally, the resident should describe the long-term concerns for patients with a STI, including infertility, ectopic pregnancy, chronic pelvic pain, and pelvic inflammatory disease (PID). (MK, PC, C)

13. Evaluate and screen post-partum patients for common problems, and obtain consultation and referral services for patients with pelvic floor problems, wound complications, breastfeeding problems, and severe post-partum depression (MK, PC, C, SBE)

14. Demonstrate the ability to work effectively as a member of a team which includes both physicians and other professionals such as social workers, nutritionists and family planning counselors (P,SBK,C)

15. Demonstrate awareness of patients’ cultural, sexual orientation, age-related and gender-based issues, and their impact on providing optimal care (C, PC, P)

16. Demonstrate self-evaluation and improvement of various aspects of their performance in an ambulatory setting (PBL,P)

**Evaluation Methods**

Global rotation evaluation after PGY-1 rotation, electronic

Evaluation and chart review with immediate feedback after presentation of each patient
Elements of Primary Care Checklist, 5 every 6 months

Patient evaluations of residents, 1 per week while in clinic

CREOG Examination results in primary care sections

Completion and logging of IUD and endometrial biopsy procedures for independent performance on electronic system

5. Gynecologic Oncology TJUH

The rotation shall consist of 6 – 7 weeks on the inpatient service as well as office hours with Dr. Rosenblum and the colposcopy clinic at JOGA. Didactics will consist of weekly formal and informal sessions with Dr. Rosenblum and Kim

Goals

1. Learn the basic pathophysiology of gynecologic malignancies

2. Learn pelvic anatomy as it pertains to surgery for gynecologic malignancy

3. Provide compassionate and appropriate patient care for patients being treated for gynecologic cancer

4. Learn the appropriate staging and treatment regimens for gynecologic cancer

5. Competently assist in major gynecologic surgical cases and provide appropriate post-operative care, including in the ICU setting.

Objectives:
Upon completion of the rotation, the PGY-2 resident must be able to:

1. Understand the basic science related to cancer biology, including viral oncogenes, the inheritance patterns for malignancies of the pelvic organs and breast, the cell replication cycle and the phases of the cycle most sensitive to radiation and chemotherapy, the embryology of gonadal migration and the origins of cell types found in benign and malignant germ cell tumors (MK)

2. Describe cancer screening for each age group and type of gynecologic malignancy, including screening for BRCA1 and BRCA 2 and risk factors for cancer (MK)

3. Discuss chemotherapy and radiation therapy, including: the ability of vital organ systems to tolerate cancer therapy, therapeutic index, changes in cell and organ physiology that result from injury due to radiation and chemotherapy; list the major chemotherapeutic agents used for treatment of malignancies of the reproductive organs and breast (alkylating agents,
antimetabolites, vinca alkaloids, antibiotics, hormones, heavy metals, immunotherapy) and describe their principal adverse effects. (MK)

4. Demonstrate intraoperative familiarity with anatomy, including the anterior and posterior abdominal wall, the vascular, lymphatic and nerve supply to the breast, external genitalia and each of the pelvic organs, the relationship between the reproductive organs and the bladder, ureters and bowel (MK, PC)

5. Work with a multidisciplinary team including gyn oncology physicians and nurses, medical oncology staff, radiation oncology staff, pathologists, social workers and palliative care staff to provide compassionate care including end of life and palliative treatment, including pain management and the appropriate indications for a “do not resuscitate” (DNR) order. (C, P, SBP)

6. Assist in patient transitions to and from home, hospital, skilled nursing facilities, and hospice in an efficient and safe manner with adequate handoffs. (SBP, C)

7. Prepare cases for presentation at the multidisciplinary pathology and patient care conferences, using appropriate resources in the medical literature to practice evidence-based medicine. (PBL)

8. Care for elderly patients with awareness of the unique considerations related to postoperative care of the geriatric patient such as adjustments in doses of analgesics, the need for early ambulation, prophylaxis for thromboembolism, prevention of falls, and consideration of the patient’s functional status in evaluating the need for referral to an assisted-living facility (MK, PC, SBP)

9. Perform the following procedures with minimal assistance by the end of the rotation: Biopsy of the cervix, endocervix, and vagina; colposcopy (see Colposcopy Goals and Objectives); conization by cold knife and loop electrical excision, opening and closing of midline and paramedian abdominal skin incisions; wound care and debridement (PC)

10. Display professional behavior in time management, accountability for patient care responsibilities, and self-directed reading of assignments required for the rotation (P)

11. Pass a simulation skills test on knot tying and suturing (MK, PC)

In addition to the above Objectives, the PGY-4 should be able to:

1. Perform the following procedures with minimal assistance by the end of the rotation: abdominal hysterectomy and BSO with the ability to open the pelvic sidewall and identify the anatomical vascular, urologic and neurologic structures (PC)

2. Assist in radical hysterectomy and pelvic lymph node dissection (PC)

3. Demonstrate familiarity with the management of intraoperative injuries to the urologic and gastrointestinal tract (PC)
Evaluation methods

Global rotation evaluation by Dr. Rosenblum

Surgical checklist cards

Simulation suturing evaluation checklist

Performance on ASCCP on-line colposcopy examination

Performance on inservice CREOG examination

Reading assignments:

Clinical Expert Series on Endometrial, Ovarian, Cervical, Vaginal and Vulvar Cancers; Bereck and Hacker’s Gynecologic Oncology 5th Edition

Assigned articles by Dr. Rosenblum

6. Reproductive Endocrinology and Infertility

The rotation for the PGY-4 shall consist of Dr. Fossum’s office hours on Monday, operating room all day Tuesday, Thursday and Friday, Dr. Batzer’s office hours on Wednesday, and Dr. Schlaff’s office hours on Fridays. The rotation for the PGY-2 shall consist of the operating room Tuesday afternoon, Thursday afternoon and all day Friday. They will be in the office with Dr. Fossum on Monday morning and with Dr. Zacher on Tuesday afternoon. Wednesday the PGY-2 resident will be with Dr. Gutmann or Dr. Gocial, on Thursday in the operating room if surgery is going on or with Dr. Fossum in the office and on Friday the resident will be in the operating room.

Typical outpatient care consists of ovulation induction, intrauterine insemination, in vitro fertilization, abnormal uterine bleeding, polycystic ovarian syndrome, uterine myomas, tubal infertility and male infertility. Residents will perform and assist in transvaginal ultrasound examinations and sonohysterography for women undergoing ovulation induction and in vitro fertilization as well as women with uterine myomas and ovarian cysts. The resident will participate in performance of hysterosalpingograms on Monday afternoon. Surgery will include robotic surgery, advanced laparoscopic procedures, laparoscopic as well as robotic hysterectomy, ovarian cystectomy and myomectomy.

GOALS:

1. The resident will demonstrate the knowledge, skills and aptitudes to manage common Reproductive Endocrinology and Infertility problems including uterine myomas, tubal obstruction, ovulation dysfunction and polycystic ovarian syndrome. (PC,MK)
2. The residents will develop ultrasound skills to evaluate uterine myomas, intrauterine pregnancies, ovarian cysts and follicular development. (PC)

3. The resident will understand the etiology of infertility, discuss a complete workup for infertility and be proficient in obtaining a history and performing physical examination along with ordering appropriate testing for a new patient with infertility (MK, PC, C).

4. The resident will demonstrate an understanding of ovulatory dysfunction, polycystic ovarian syndrome, primary and secondary amenorrhea, anovulation, hirsutism, hyperprolactinemia, and hypothyroidism. They will be able to recognize these problems, do the appropriate workup and manage patients in order to help them either ovulate or to resolve their hirsutism problem. (PC, MK, C)

5. The resident will understand the insurance ramifications of infertility, costs of procedures as well as surgery and be able to present the treatment plan for the patient in a cost effective manner. (SBP)

6. The resident will be proficient in basic laparoscopy, myomectomy, hysterectomy, hysteroscopy and ovarian cystectomy. They will demonstrate familiarity with the indications and contraindications for robotic procedures and be able to function as a first assistant and perform basic techniques as a primary surgeon in robotic cases. The PGY 4 will demonstrate appropriate progression in surgical skills (PC).

7. The resident will understand the embryology and control of sexual differentiation; steroid biosynthesis and the impact of enzymatic and receptor defects on sexual development; and diagnosis and management of common uterovaginal congenital defects. (MK)

OBJECTIVES: Upon completion of the rotation, the resident will be able to:

1. Perform a complete history, physical examination and laboratory and radiologic examination for uterine myomas (PC).
2. Compassionately counsel patients in need of treatment of infertility on their prognosis and options (P, C).
3. Demonstrate competence and responsibility in the preoperative evaluation as well as postoperative care of surgical patients (PC, P).
4. Describe ovulation induction agents, initiate management with these agents and be familiar with the outcomes of the treatments for anovulation (MK, PC).
5. Competently document their workups, ongoing ultrasound examinations and procedures in the electronic medical record (SBP, C, P).

EVALUATION:

Global evaluation during the PGY-1 and 2 will be completed in an electronic fashion. Evaluation will include chart review, resident’s demeanor with patients and staff and presentation of patients. The resident will present a topic at the end of each rotation for evaluation.

ASSIGNED READING

A textbook on REI such as Speroff’s Clinical Gynecologic Endocrinology and Infertility, and assigned articles by the faculty.
7. Urogynecology

Description of clinical experience:
The resident will spend two office sessions per week with Dr. Montella and Sultana seeing new and return patients and performing intake histories. The resident will then present to the attending, who will review the history with the resident. The resident will perform the physical exam under the supervision of the attending. After the exam, the resident’s history taking and physical examination skills with be critiqued by the attending, and a treatment plan will be formulated, with review of all possible therapy. This will then be discussed with the patient and any family present by the resident and attending. The resident will also perform in-office cystoscopy and urodynamic testing with interpretation of results. The resident will also see all pre- and post-operative patients. The resident will work with the Urogyn nurse practitioner learning pessary insertion techniques and management. The resident will first assist on all major surgical cases and perform post-operative management.

Goals:

1. To use history and physical examination to triage and treat pelvic floor disorders.
2. Learn how the POP-Q system can direct surgical and non-surgical therapy
3. To be able to discuss surgical and non-surgical management of prolapse and incontinence with patients.
4. To become proficient in cystoscopy to identify ureters and bladder injury
5. To become proficient in at least one surgical procedure for incontinence
6. To perform and interpret urodynamic tests
7. To become proficient in performance of two commonly performed prolapse procedures
8. To learn how to insert and manage pessaries

Objectives: Upon completion of the rotation, the resident must be able to:

1. Perform a POP-Q vaginal examination (PC, MK)
2. Demonstrate knowledge of pelvic organ supports (MK)
3. Demonstrate ability to interpret a voiding diary and symptom index score (MK)
4. Demonstrate ability to take a history focusing on prolapse and incontinence (PC, C)
5. Develop and counsel patients on surgical and non-surgical treatment plans for incontinence and prolapse (MK, PC, C)
6. State the dosages of, indications for, and pharmacology of anticholinergic medications. (MK)
7. Discuss the epidemiology and impact on quality of life of pelvic floor disorders (MK, PC, PBL)
8. Assemble and use a cystoscope (MK, PC)
9. Interpret a urodynamic test (MK, PC)
10. Size and fit a pessary and instruct a patient in its use (PC)
11. Perform a TVT and/or Burch procedure (PC)
12. Perform a uterosacral suspension, colporraphy and understand an abdominosacral colpopexy procedure (PC)
13. Effectively work with the clinical support staff as a member of the team to provide outstanding patient care (C, SBP)
14. Demonstrate interpersonal and communication skills that result in effective information exchange with patients, their families, and the clinical care team. (C, SBP)
15. Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities (P)
16. Analyze practice experience and perform practice-based improvement activities using a systematic methodology (SBP, PBL)

Reading assignments:
Ostergard’s Urogynecology and Pelvic Floor Dysfunction
Selected articles as discussed on service

Evaluation:
1. Global evaluations by Urogyn faculty
2. Performance on CREOG exam
3. Surgical checklist cards

8. TJUH Night Float

The rotation shall consist of supervision of all obstetrical and gynecologic services at night, with duties commiserate with the descriptions of those rotations at the PGY-4 level

Goals: In addition to the goals of the PGY-4 Obstetrics and Gynecology rotations, the resident will:

1. Develop competency in managing and coordinating routine and high risk labor patients including emergencies (PC,SBP, P, C)
2. Develop effective relationships with ancillary staff in the emergency room and operating rooms for effective care of emergency gyn problems and admissions (PC,SBE, P, C)
3. Develop leadership skills in supervising junior residents and medical students (P, C)
4. Develop the ability to triage all types of ob and gyn patients presenting to the emergency department and labor floor (PC, SBE).

Objectives: Upon completion of the rotation, the resident must be able to:

1. Effectively manage the triage and intrapartum course of multiple ob patients (PC, SBP,C)
2. Interact in an effective and professional manner with nursing and anesthesia department colleagues (P, SBP)

3. Coordinate and perform emergent gyn surgery (P, C, PC)

**Evaluations:**

Global rotation evaluations

Professionalism evaluation from L&D nurses

Surgical checklist cards

Mini-cex

**9. Day Float**

The rotation shall consist of coverage of clinics, vacation and illness related absences as needed, as well as medical student weekly meetings.

**Goals:**

1. See goals of rotations in obstetrics, gynecology and clinic
2. To develop effective teaching skills for medical education

**Objectives:** at the end of this rotation, the resident must be able to:

Effectively run teaching sessions with medical students rotating through ob/gyn (P,C, SBP)

**10. Obstetrics**

This rotation shall consist of 6-7 weeks managing the Labor and Delivery unit at TJUH with responsibility for supervising all junior residents and rotating residents and coordinating all patient care especially that of the JOGA service, as well as overseeing the post-partum floors.

**Goals:**

1. To become competent at leadership in prioritizing and triaging all care for laboring patients, including an understanding of the role of ancillary personnel and other members of the health care team, available system resources, and concepts of team resource management (SBP).
2. To carry out all aspects of intrapartum and postpartum care, including management decisions and performing surgical delivery, as the primary physician (MK,PC).
3. To become familiar with standards of care and evidence based medicine in the care of obstetrical patients (MK).
4. To review the results of care in a systems based Grand Rounds setting (SBP,PBL).

**Objectives: By the end of the rotation, the resident must be able to:**

1. Direct and perform the care of all patients on Labor & Delivery with appropriate supervision by the attending faculty (PC, MK, C)
2. Perform cesarean section as the primary surgeon and teach it to junior residents (PC,C)
3. Perform operative vaginal delivery with appropriate supervision (PC)
4. Respond to obstetrical emergencies as part of the OB CRT (Critical Response Team) (PC, SBP, P,C)
5. Demonstrate the ability to supervise, direct and teach the members of the inpatient team and interact effectively with ancillary nursing and operating room staff (P, C, SBP)
6. Analyze and present the patient outcomes from their rotation at a Grand Rounds along with a systems based problem they identified (may also be done on GYN rotation) by maintaining a database of complications and readmissions from the service (C, SBP,PBL)

**Evaluation methods:**

Global evaluation
Surgical checklist cards
Mini-cex
Evaluation by junior residents
Evaluation of presentation at Grand Rounds

**Reading:**

Textbooks in obstetrics and evidence based obstetrics, Prologues, and articles as assigned by the faculty.

**11. Maternal-Fetal Medicine**

The rotation will consist of 6-7 weeks on the inpatient Maternal Fetal Medicine Service including daily rounds and didactics, ultrasound and counseling sessions in the office with the fellows and attendings as well as twice-weekly MFM clinic at JOGA.

**GOALS:**

1. Learn how medical conditions affect pregnancy and how pregnancy affects medical conditions (MK)
2. Develop management and treatment plans for patients with high pregnancy problems such as preterm labor, intrauterine growth retardation, hypertension related to pregnancy, substance abuse and multifetal pregnancies (MK, PC)
3. Appropriately manage or triage patients with high risk problems depending on available resources (SBP)
Upon completion of the rotation, the PGY-2 and PGY-4 residents must be able to:

1. Demonstrate proper history taking of women with normal and abnormal pregnancies (PC, MK)
2. Demonstrate proper focused physical exam skills on women pregnant with normal and abnormal pregnancies (PC, MK)
3. Reinforce the normal physiologic changes in pregnancy to other providers, patients, and their families in order that they may better understand their condition (MK, C)
4. State the dosages of, indications for, pharmacology, and risks and benefits of commonly used medications in pregnancy (MK)
5. Understand, utilize, and interpret appropriate antepartum fetal assessment including fetal heart rate monitoring, ultrasonography, and amniocentesis (MK, PC)
6. Describe the indications, risks, benefits, and appropriate use of amniocentesis, cervical cerclage, chorionic villus sampling, percutaneous umbilical blood sampling and fetal transfusion (PC, MK, C)
7. Provide excellent, compassionate patient-centered counseling for women with abnormal prenatal screening test results (PC, C)
8. Develop a personal system for evaluating existing and new scientific evidence relating to the care of maternal-fetal medicine patients (MK, PBL, SBP)
9. Effectively work with the clinical support staff as a member of the team to provide outstanding patient care (C, SBP, P)
10. Demonstrate interpersonal and communication skills that result in effective information exchange with patients, their families, and the clinical care team (C, SBP)
11. Demonstrate sensitivity and responsiveness to patients’ culture, age, gender, and disabilities (P)
12. Analyze practice experience and perform practice-based improvement activities using a systematic methodology (SBP, PBL)
13. Advocate for quality patient care (SBP)

Description of didactic experiences:
1. Attendance at grand rounds at Jefferson in Ob-Gyn
2. Attendance at didactic resident lecture series on Thursday morning
3. Presentation of a patient-specific MFM topic at morning report
4. Presentation and discussion of manuscripts weekly at Tuesday MFM Journal Club
5. Attendance at the Wednesday 12noon SMFM videoconference lectures
6. Participation in the weekly MFM clinical and educational meetings on Thursday 10a-12n

Reading assignments:
1. Gabbe’s Obstetrics: Normal and Problem Pregnancies
2. Williams Obstetrics
3. Creasy and Resnik’s Maternal-Fetal Medicine Principles and Practice
5. Selected literature and ACOG Practice Bulletins as discussed on service
Evaluation process:
1. Electronic evaluations by MFM faculty
2. Performance on CREOG exam
3. Evaluation of MFM rotation by resident

Feedback mechanisms:
1. Daily, weekly, and overall rotation one-on-one and team feedback by attending and fellow regarding both individual patient care and the overall patient service
2. Semi-annual resident evaluation with program director