

Mini-Elective for Medical Students: The Menopausal Transition, Now and Beyond Course Number _____

- **Faculty Coordinators:**
 - Irwin Kerber, MD, NCMP
 - David Rogers, MD, NCMP
- **Periods offered: May 4, 2020 start date**
- **Length: 2 weeks**
- **Max Students: 10**
- **Minimum # Students: 5**
- **First day contact: Kimberly Loggins, 214.648.4770**
- **First contact time: TBD**
- **First day location: Remote elective**
- **Prerequisites: none**

- **Brief summary:**
 - All healthcare providers are impacted by the vicissitudes of the menopause. This course will provide a focused exploration of the menopause, beginning with a review of the physiology, pathophysiology, **physical and psychological** changes of **the** menopause. The remainder of the course will explore the controversies surrounding menopausal hormone therapies. At the conclusion, students will be better prepared to manage the common gynecologic concerns of the **midlife woman and better understand issues involved with menopausal hormone therapy. Numerous case histories will be presented for discussion.**

- **Course Objectives:**
 - Define menopause
 - Review the terminology, physiology, and pathophysiology of the menopause.
 - Analyze the various signs and symptoms of multiple organ systems associated with the loss of ovarian function.
 - Reflect on the controversy regarding menopausal hormone therapy
 - Discuss the difficulties for the patient in obtaining/using hormone replacement therapy in the current healthcare systems

Educational Program Objectives	Related Course Objectives	Assessment methods (<i>examples below</i>)
Patient Care: Students will demonstrate the ability to provide patient-centered care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health as part of the interprofessional team.	No direct patient care-remote elective	
Knowledge for Practice: Students will demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care.	Define menopause Review the terminology, physiology, and pathophysiology of the menopause.	<ul style="list-style-type: none"> ○ Active participation in lectures, discussion groups and case presentations ○ Verbal presentation and discussion of reflection papers <ul style="list-style-type: none"> ▪ Peer evaluation of verbal presentations ▪ Faculty evaluation of written project
Interpersonal and communication skills: Students will demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, families and health	Students will communicate effectively via chat, online meetings, written assignments, email.	<ul style="list-style-type: none"> ○ Attendance ○ Active participation in lectures, discussion groups and case presentations

professionals.		
Personal and professional development: Students will adhere to professional standards and demonstrate the qualities required to sustain lifelong personal and professional growth.	Students will adhere to the professional guidelines for online sessions. (separate document)	<ul style="list-style-type: none"> ○ Attendance ○ Active participation in lectures, discussion groups and case presentations ○ Submission of all assignments as scheduled
Critical thinking and Discovery: Students will be able to critically appraise literature, apply knowledge and engage in scholarly activity	<p>Analyze the various signs and symptoms of multiple organ systems associated with the loss of ovarian function.</p> <p>Reflect on the controversy regarding menopausal hormone therapy.</p>	<ul style="list-style-type: none"> ○ Verbal presentation and discussion of reflection papers <ul style="list-style-type: none"> ▪ Peer evaluation of verbal presentations ▪ Faculty evaluation of written project
Health Care systems and society: Students will 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.	Discuss the difficulties for the patient in obtaining/using hormone replacement therapy in the current healthcare systems	<ul style="list-style-type: none"> ○ Active participation in lectures, discussion groups and case presentations ○ Verbal presentation and discussion of reflection papers <ul style="list-style-type: none"> ▪ Peer evaluation of verbal presentations ▪ Faculty evaluation of written project

- **Methods of instruction:**
 - Online didactics
 - Reading and Discussion Groups
 - Video Clips (North American Menopause Society-NAMS)
 - Case presentations with discussion (Case Files, Association of Professors of Gynecology & Obstetrics-APGO, NAMS)
 - Reflective written and online presentation with discussion.
- **Overview of student responsibilities:**
 - Attendance at all assigned activities
 - Active participation in online sessions
 - Completion of a project/problem set

Menopause Transition Elective – Proposed Schedule

<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>
Lecture 1 ^a Lecture 2 Case Presentation ^b Group Discussion ^c	Lecture 1 Lecture 2 Case Presentation Group Discussion	Reading + Research ^d	Lecture 1 Lecture 2 Case Presentation Group Discussion	Lecture 1 Lecture 2 Case Presentation Group Discussion
<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>
Lecture 1 Lecture 2 Case Presentation Group Discussion	Lecture 1 Lecture 2 Case Presentation Group Discussion	Reading + Research	Lecture 1 Lecture 2 Case Presentation Group Discussion	Case Presentation Presentation/discussion of reflection papers ^e

- ^{a.} 40 min lecture + 15 min Q/A
 - ^{b.} 15 min case presentation + 40 min discussion
 - ^{c.} 60 min group discussion – topics suggested by group
 - ^{d.} 4 hr individual reading and research, articles assigned by faculty
 - ^{e.} 3 hr presentation of reflection papers and group discussion
- 40 hours (20 per week)

- **Method of evaluation of students and requirements:**

- Attendance
- Active participation in lectures, discussion groups and case presentations
- Verbal presentation and discussion of reflection papers
 - Peer evaluation of verbal presentations
 - Faculty evaluation of written project

OUTLINE (AS RELATED TO MENOPAUSE)

- **WEEK 1 – MENOPAUSE TRANSITION IN DETAIL**

- i. Introduction / Physiology / Demographics / Terminology
- ii. Stages of reproductive aging (STRAW+10)
- iii. Decline in fertility
- iv. Vasomotor symptoms
- v. Sleep disorders
- vi. Vulvovaginal complaints / Genital Syndrome of Menopause(GSM)
- vii. Lower urinary tract problems, pelvic prolapse
- viii. Sexual dysfunction
- ix. Osteopenia/Osteoporosis/DEXA scanning and FRAX
- x. Sarcopenia / decreased muscle mass and/or function
- xi. Cardiovascular Disease
- xii. Lipid changes
- xiii. Metabolic Disorders / Diabetes / Metabolic Syndrome
- xiv. Cognitive dysfunction / Memory disorders
- xv. Depression
- xvi. Dermatologic changes in menopause
- xvii. Headaches
- xviii. Female cancers in mid/late life (risks and screening)

- **WEEK 2 – MANAGEMENT**

- Controversies over treatment vs no treatment
- What is Postmenopausal Bleeding and how do we evaluate it?
- Life style modification
- Disease management (Hypertension,Diabetes, Substance use)
- Diet
- Exercise

- Calcium/Vitamin D
 - Sexually Transmitted disease in the geriatric population
 - For perimenopause: Contraception and non-contraceptive benefits of hormonal contraception
 - Hormone management
 - i. History of hormone therapy
 - ii. Women's Health Initiative in perspective
 - iii. Estrogen(E) / Progestins (P)/ E+P
 - iv. SERMs
 - v. TSECs
 - vi. Prasterone (DHEA)
 - vii. Bioidentical/Natural hormone therapy
 - viii. Controversy over implants and testosterone
 - ix. Complementary and Alternative Medicine alternatives
 - 1. Herbal, soy, supplements, etc.
 - Perioperative considerations in mid-late life female patients
 - i. Preoperative concerns in these patients
 - ii. Post hysterectomy / post BSO hormone treatment
 - Laser treatment for GSM
 - Risk reducing bilateral salpingo-oophorectomy (BSO)
 - ART in Perimenopause
- **Reflection Paper** – Using the information covered in this course, and considering the future demographic changes anticipated for mid-life and post-reproductive women (aging), what are your predictions for the future of health care for this group? What do you anticipate as some of the challenges and how should we, as their physicians, prepare for and deal with those challenges?