Life Science: Human Reproduction Fall 2017

LECTURE SYLLABUS

CORE-UA 315       Mon and Wed       3:30pm-4:45pm       Silver Building Room 207

Course Director: Frederick Naftolin, M.D., Ph.D. (frederick.naftolin@nyumc.org)

Laboratory Director: Fang Helen Wang, Ph.D. (fang.wang@nyumc.org)

Teaching Assistants: Kirtan Kaur, M.S. (Kirtan.Kaur@nyumc.org)
                     LeRoy Robinson, M.S. (LeRoy.Robinson@nyumc.org)
                     Mitra Ahmadi, B.S. (mitra.ahmadi@nyumc.org)


Supplemental Reading: Middlesex, Jeffrey Eugenides, Picador, New York, 2002

Course Organization: The course has two components: lecture and lab. The lecture portion will account for 80% of your final grade. This 80% is comprised of two exams each worth 35% and a term paper worth 10%. The lab component will account for 20% of your final grade.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Lectures</th>
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| W Sept 6 | INTRODUCTION AND OVERVIEW OF MALE AND FEMALE REPRODUCTION/COURSE ORGANIZATION  
Frederick Naftolin, M.D., Ph.D. |
| M Sept 11 | FEMALE REPRODUCTIVE SYSTEM  
Frederick Naftolin, M.D., Ph.D. (HRB P. 23-49) |
| W Sept 13 | MALE REPRODUCTIVE SYSTEM  
Frederick Naftolin, M.D., Ph.D. (HRB P. 67-83) |
| M Sept 18 | HORMONES OF THE REPRODUCTIVE SYSTEM  
Frederick Naftolin, M.D., Ph.D. (HRB P. 3-21) |
| W Sept 20 | OVARIAN AND ENDOMETRIAL CYCLES  
Frederick Naftolin, M.D., Ph.D. (HRB P. 51-65) |
| M Sept 25 | SEXUAL DIFFERENTIATION, GENDER IDENTITY  
Frederick Naftolin, M.D., Ph.D. (HRB P. 87-102, 303-319) |
| W Sept 27 | PUBERTY AND ADULT REPRODUCTION  
Frederick Naftolin, M.D., Ph.D. (HRB P. 103-118) |

Module 2: Adult Reproduction

| M Oct 2 | HUMAN SEXUAL RESPONSE  
Frederick Naftolin, M.D., Ph.D. (HRB P. 135-156) |
| W Oct 4 | GAMETES AND FERTILIZATION  
Leroy Robinson, M.S. (HRB P. 159-172) |
| M Oct 9 | No Lecture - Columbus Day |
| W Oct 11 | PREGNANCY, EMBRYO DEVELOPMENT AND BIRTH  
Frederick Naftolin, M.D., Ph.D. (HRB P. 175-203, 205-224, 227-233) |
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Presenter</th>
<th>Notes</th>
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<tbody>
<tr>
<td>M Oct 16</td>
<td>HEALTH RELATED CONSEQUENCES OF PREGNANCY</td>
<td>Kirtan Kaur, M.S. (HBR P 33-38, 40-49, 78-83)</td>
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<td>W Oct 18</td>
<td>GLOBAL REPRODUCTIVE INEQUITIES</td>
<td>Veronica Ades, M.D.</td>
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<td>M Oct 23</td>
<td>DEBATE #1 – THE TRANSGENDER BATHROOM BILL: DO WE PROTECT PUBLIC PRIVACY AND PROTECTION OR TRANSGENDER EQUALITY AND CIVIL RIGHTS?</td>
<td>Frederick Naftolin, M.D., Ph.D.</td>
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<td>W Oct 25</td>
<td>MIDTERM EXAM</td>
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<td><strong>Module 3: Reproduction Management and Diseases</strong></td>
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<td>M Oct 30</td>
<td>GENETIC TESTING AND PRENATAL DIAGNOSAL</td>
<td>Francine Hughes, M.D. (HBR P. 177-196 &amp; 227-241)</td>
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<td>W Nov 1</td>
<td>EVOLUTION OF HUMAN REPRODUCTION AND ITS CONSEQUENCES</td>
<td>Frederick Naftolin, M.D., Ph.D. (HRB P. 187-102 &amp; 177-196 &amp; 227-241)</td>
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<tr>
<td>M Nov 6</td>
<td>REPRODUCTIVE GENOMICS</td>
<td>James Grifo, M.D., Ph.D. (HRB P. 181-185)</td>
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<td>W Nov 8</td>
<td>ETHICS AND LEGAL ASPECTS OF HUMAN REPRODUCTION</td>
<td>Frank Chervenak, M.D.</td>
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<td>M Nov 13</td>
<td>SEXUALLY TRANSMITTED DISEASES</td>
<td>Alan Arslan, M.D. (HRB P. 245-282, 323-346)</td>
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<td>W Nov 15</td>
<td>INFERTILITY AND ITS TREATMENT</td>
<td>Frederick Licciardi, M.D. (HRB P. 283-298)</td>
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<tr>
<td>M Nov 20</td>
<td>FAMILY PLANNING</td>
<td>Amitasrigowri Murthy, M.D. (HRB P. 245-282, 323-346)</td>
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<td>W Nov 22</td>
<td>No Lecture - Thanksgiving Break</td>
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<td>M Nov 27</td>
<td>REPRODUCTIVE TOXICOLOGY</td>
<td>Alan Arslan, M.D. (HRB P. 194-196)</td>
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<td>W Nov 29</td>
<td>DEBATE #2 – FEMALE HEALTH: SHOULD MY TAX DOLLARS GO TOWARDS WOMEN’S HEALTHCARE?</td>
<td>Frederick Naftolin, M.D., Ph.D.</td>
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<td><strong>Module 4: Reproductive Aging and its Consequences</strong></td>
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<td>M Dec 4</td>
<td>REPRODUCTIVE AGING</td>
<td>David Keefe, M.D. (HRB P. 119-131)</td>
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<td>W Dec 6</td>
<td>REPRODUCTIVE AGING-RELATED DISEASES/MENOPAUSE TREATMENT</td>
<td>Lila Nachtigall, M.D. (HRB P. 119-131)</td>
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<td>M Dec 11</td>
<td>GENDER DYSPHORIA AND HUMAN REPRODUCTION</td>
<td>Gwendolyn Quinn, Ph.D.</td>
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<td>T Dec 12</td>
<td>Lecture Review For Preparation of Final Exam</td>
<td>Frederick Naftolin, M.D., Ph.D.</td>
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<td>W Dec 13</td>
<td>SHOULD WE CHOOSE OUR CHILDREN? GENETIC ENGINEERING AND THE FUTURE OF HUMAN REPRODUCTION</td>
<td>Brendan Parent, J.D.</td>
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<td>M Dec 18</td>
<td>DEBATE #3 – GENETIC ENGINEERING: SHOULD WE GENETICALLY MANIPULATE EMBRYOS?</td>
<td>Brendan Parent, J.D.</td>
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<td>(Submit papers)</td>
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<td>W Dec 20</td>
<td>FINAL EXAM</td>
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