Title of Clerkship: Male Reproductive Endocrinology and Infertility

Elective Year(s): Fourth Year Elective

Department: Urology

Type of Elective: Clinical

Clerkship Site: UTMC

Course Number: UROL 708

Blocks Available: Spring Semester

Number of Students/Block: 1

Faculty: Puneet Sindhwani, MD
          Tariq Shah, PhD

Elective Description/Requirements: This elective aims at fostering professional and personal development of medical students in male infertility and reproductive endocrinology.

The elective will address the following key areas for advanced learning in the discipline of male infertility and reproductive endocrinology:

A. Advanced physiology and pathophysiology of male reproductive endocrinology and infertility (MREI)
B. Clinical experience in MREI
   1. Clinical presentation, work up and formulation of differential diagnosis
   2. Physical examination as related to MREI
   3. Initial work up
   4. Advanced workup
   5. Interpret results and formulate a treatment plan
   6. Treatment options
   7. Participate in clinical and operative procedures related to MREI
   8. Men’s health clinic participation
C. Hands on andrology diagnostics lab experience.
   1. Role of semen analysis in diagnosis of male infertility
   2. Patient preparation for semen analysis
   3. Perform SA including sperm morphology
   4. Interpret results
   5. Observe Andrology and embryology lab procedures
   6. Role of ART in male infertility
   7. Advances in Onco-fertility preservation in men
D. Scholarly activity in MREI:
   1. State-of-the-art advances in MREI
   2. Review of practice committee guidelines (AUA)
   3. Review of literature for research projects
   4. Seminars in male infertility

Length of Clerkship: 4 weeks
## Educational Course Objectives:

<table>
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<tr>
<th>Code</th>
<th>Objective</th>
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<tbody>
<tr>
<td>MK-1, MK-2</td>
<td>1. Explain the importance of molecular and physiological mechanisms in clinical decision-making in male infertility.</td>
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<td>MK-4</td>
<td>2. Explain the pathology and pathophysiology of male reproductive disorders.</td>
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<td>PBL-5, MK-1</td>
<td>3. Be able to demonstrate and identify surgical anatomy of the male reproductive and associated organs including but not limited to important blood vasculature of testes during and after procedures.</td>
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<tr>
<td>MK-2, PBL-4</td>
<td>5. Describe results of basic and advanced andrology and embryology laboratory procedures.</td>
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<td>MK-14, SBP-5, PB-5, PB-4</td>
<td>6. Exhibit respect, sensitivity and empathy during the treatment and management of patients with infertility</td>
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### Professionalism:

UT/COM students will meet or exceed the institutional standards for professionalism as stated in the current Educational Program Objectives and the Educational Course Objectives for the Sponsoring Department.

### Instructional Methods:

- Didactic
- Active Learning
- Observation of and participation in patient surgeries
- Surgical simulations on da Vinci surgical robot

### Evaluation Methods:

1. Clinical performance
2. Faculty observation and evaluation
3. Professional assessments
4. Attendance

### Prerequisites:

Must have finished second year of medical school successfully

### Clerkship Director:

Puneet Sindhwani, MD  
Tariq Shah, PhD

### Clerkship Coordinator:

Lauren Hadeed  
419-383-3505  
Lauren.clarke@utoledo.edu

### Special Requirements:

None