Overview of Fellowship Program

- **Program Name:** Male Reproductive Medicine and Surgery
- **Program inception date:** July 2017
- **Institution(s):** University of Miami
- **Andrology Fellowship Director:** Ranjith Ramasamy, MD
- **Summary of the Program:**

  Clinical program: We see men with infertility, sexual dysfunction, penile abnormalities, scrotal/groin pain and/or testosterone deficiency syndrome. Our clinical team includes 3 sub-specialty urologists, and an andrology lab director. We collaborate closely with the REI and oncologists. In addition to clinical evaluation and operative training, fellows will gain experience in clinical andrology lab tests, management of infertility in men with spinal cord injury and exposure to a fertility preservation program.

  Research Program: We have a very active research program with basic science projects on human testis models to evaluate genetics of male infertility and clinical trial to evaluate the effect of clomiphene citrate on idiopathic male infertility. We also have dedicated laboratory space to study animal models with Klinefelter syndrome and Leydig stem cells.

- **Fellowship Faculty:**
  - Ranjith Ramasamy, MD
  - Charles Lynne, MD
  - Bruce Kava, MD
  - Nancy Brackett, PhD

- **Number of Positions per Year:** 1
- **Duration of Fellowship:** 1 year fellowship: 80% clinical/20% research
- **Accreditation:** Jackson Health System Graduate Medical Education
Andrology Program

- **Who to contact regarding the program:**
  Millie Ferro
  Urology Administration M-814
  Leonard M. Miller School of Medicine

  Contact e-mail: mferro@med.miami.edu
  Contact phone number: (305) 243-3246
  Fax: (305) 243-6597
  Contact Website:

**Overview of Fellowship Program / Description of Program:**

The Male Reproductive Medicine and Surgery Fellowship will enable the fellow to acquire an advanced body of knowledge and level of skill in the management of reproductive and sexual health diseases in order to assume a leadership role in teaching and research in the field. This will include:

- an understanding of the classification, evaluation, and treatment of erectile dysfunction;
- knowledge of radiographic evaluation of the blood supply of the penis with Doppler ultrasound;
- the ability to counsel patients on treatment options for therapy for erectile dysfunction and Peyronie’s disease;
- an understanding of the basic techniques of testicular biopsy, evaluation and tissue processing, recognition of basic testicular pathology, and knowledge of prognostic factors that can help predict the chances of successful sperm retrieval;
- an understanding of the procedures for treatment of infertility in men with spinal cord injury (penile vibratory stimulation and electroejaculation)
- an understanding of basic andrology clinical laboratory testing such as semen analysis, sperm morphology and viability, sperm FISH testing and sperm / testicular tissue cryopreservation.
- Organize a multidisciplinary approach to mens health and establish a mens health clinic

**Fellowship Summary**

The clinical fellows have 80% clinical and 20% research / academic time. They are exposed to ~ 3 surgical cases/day for 2 days/week. The fellows also attend 1-2 clinic days/wk with an average of ~ 50 patients/day. They are expected to attend and present at regular academic grand rounds, national conferences and teach residents and medical students.

It is expected that the fellows develop expertise in the medical management of men with Male infertility, Sexual dysfunction, Scrotal Pain and Testosterone Deficiency Syndromes. Including endocrine, antibiotic, anti-inflammatory, complimentary medical therapies uses, indications and expected outcomes.
Andrology Program

It is also expected that fellows become experts in penile duplex ultrasound, scrotal ultrasound, and establishing an intracavernosal injection program (for ED) and Xiaflex program (for Peyronies disease). They will also be expected to gain experience in the andrology laboratory and learn to perform and interpret semen analysis, strict morphology and viability. They will also be exposed to starting and establishing a fertility preservation program and learn about procedures involved in semen and testicular tissue cryopreservation.

It is also expected that the fellows develop expertise in the surgical treatment of andrological problems (microsurgical reconstruction – vasectomy reversal, surgical retrieval of sperm – microdissection testicular sperm extraction, resection of prostatic duct cysts - TURED, infertility in men with spinal cord injury – PVS and EEJ, surgery on the penis for penile prosthesis, deformity, surgery for Peyronies disease - grafts).

Program Weighting:
Male Infertility/Sexual function/Andrology: 40%, 50%, 10%

Education Program:

<table>
<thead>
<tr>
<th>Type of Experience</th>
<th>Weekly Structured</th>
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</thead>
<tbody>
<tr>
<td>Surgery</td>
<td>2 days / week</td>
</tr>
<tr>
<td>Andrology Clinics</td>
<td>2 days / week</td>
</tr>
<tr>
<td>Academics / research</td>
<td>1 day / week</td>
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Unique qualities:

The clinical program involves evaluation of complex and common types of male infertility, penile deformities, and sexual dysfunction. We also have a very active research program available to the fellows – clinical trials, prospective studies as well as access to basic science laboratory.