Overview of Fellowship Program

- **Program Name:** Male Reproductive Medicine Fellowship
- **Program inception date:** 1994
- **Institution:** Mount Sinai Hospital, Women's College Hospital and Hospital for Sick Children; University of Toronto, Toronto, Ontario, Canada
- **Andrology Fellowship Director:** Keith Jarvi MD, FRCSC

**Summary of the Program:**
Clinical program: We see approximately 2000 new patients yearly in our specialized center dedicated to managing men with infertility, sexual dysfunction, penile abnormalities, scrotal/groin pain and/or testosterone deficiency syndrome. Our clinical team includes 3 sub-specialty trained urologists, an endocrinologist with special expertise in male reproductive biology and social workers in sexual counselling. We collaborate closely with the REI, pain medicine service, laboratory medicine, medical genetics and neurology. We perform over 400 microsurgical procedures yearly (vasectomy reversals, Micro-TESE, varicocelectomies, cord denervations, epididymectomies) and ~ 100 sperm retrievals yearly. We also perform ~ 25 penile reconstructions and 20 penile prostheses annually.

Research Program: We have a very active research program with basic science projects on human testis models to understand sperm maturation factors and germ cell damage, maturation of human germ cells, protein markers for male infertility, protein markers for prostate cancer and male contraceptives. We also have an active education research program with development of models to objectively monitor the acquisition of surgical skills.

- **Fellowship Faculty:**
  - Keith Jarvi MD, FRCSC
  - Kirk Lo MD, FRCSC
  - Ethan Grober MD, FRCSC
  - Adam Millar MD FRCSC

- **Number of Positions per Year:** 1-2
- **Duration of Fellowship:**
  - 1 year fellowship: 80% clinical/20% research
  - 2 year fellowship: first year 100% research, 2nd year 80% clinical/ 20% research. Fellows may obtain an MSc through the Institute of Medical Sciences for the 2 year fellowships.
Andrology Program

- **Accreditation:**
  University of Toronto Fellowship Program

- **Who to contact regarding the program:**
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  Fax: 416-586-4776
  Website: http://www.mountsinai.on.ca/care/mkuwc/education

**Overview of Fellowship Program:**
Clinical Fellowship: a one year program to allow fellows to be accomplished in the diagnosis and medical and surgical management of men with infertility, sexual dysfunction, penile abnormalities, testosterone deficiency syndrome and scrotal/groin pain.
Research-Clinical Fellowship: a two year fellowship, one year of which is dedicated to obtaining research training either in basic science, clinical epidemiology or education and the second year is identical to the clinical fellowship described above.

**Description of Program:**
This is a specialized clinical and research program dedicated to male reproductive medicine. This is the largest male infertility program in Canada, with patients coming from all over Canada many for tertiary or quaternary level of care. We have also developed a multi-disciplinary (Urology, Neurology, pain medicine and sports medicine) scrotal/groin pain program which is unique in Canada, a large program for penile reconstruction (Peyronie’s Disease) and penile prosthesis and a program in sexual dysfunction.

**Fellowship Summary**
The clinical fellows have 80% clinical and 20% research time. They are exposed to ~ 3 surgical cases/day 2-3 days/week, working with Drs Jarvi, Lo and Grober. The fellows also attend 1-2 clinic days/wk with an average of ~ 50 patients/day.

There are regular academic rounds.

These are high volume surgical and clinical practices, with many of the patients having highly complex conditions often being referred for tertiary or quaternary care.

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 genetic testing and counseling, Imaging use and interpretation, Sperm testing and interpretation, Hormonal evaluation, Infection screening, Environmental, nutritional, and medical causes of male infertility,

It is also expected that the fellows develop expertise in the surgical treatment of andrological problems (microsurgical reconstruction and correction of reproductive tract alterations, surgical retrieval of sperm, resection of prostatic duct cysts, surgery on the penis for penile prosthesis, deformity, surgery for undescended testis, surgery for scrotal pain syndromes).

Program Weighting:
Male Infertility/Sexual function/Andrology: 70%, 20%, 10%

Education Program:

<table>
<thead>
<tr>
<th>Type of Experience</th>
<th>Weekly Structured</th>
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<tbody>
<tr>
<td>Surgery</td>
<td>2-3 days/week</td>
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<tr>
<td>Andrology Clinics</td>
<td>1-2 days/wk</td>
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Unique qualities:
This is a high volume clinical program with patients coming to treat both complex and common types of male infertility, penile deformities, sexual dysfunction and scrotal/groin pain. We also have a very active research program available to the fellows.