

## ANDROLOGY FELLOWSHIP: GUIDELINES AND OBJECTIVES

McGill University Health Centre, Division of Urology

The Andrology fellowship at the McGill University Health Centre (Division of Urology) is offered as two-year fellowship. The fellows will work under the direct supervision of fellowship-trained Andrology experts: Drs. Armand Zini, Peter Chan and Serge Carrier. The fellowship is designed to teach the urologist the necessary clinical and surgical skills to effectively manage male infertility. The Andrology fellowship is not designed to train the urologist in sexual medicine. The fellows may also spend up to three months working with female infertility specialists to gain some understanding of the clinical evaluation of the infertile woman and the techniques of assisted reproduction.

The fellows will need to meet specific **learning and research objectives** and will be given **clinical responsibilities**.

### LEARNING OBJECTIVES:

To meet these objectives, fellows will attend all andrology clinics, participate in regular andrology rounds (with presentation of clinical and basic science topics in andrology) and will be given a list of suggested reading material. Specific areas to be covered will include:

- 1) ***Biology of reproduction.*** Fellows are expected to learn the basic aspects of:

- Spermatogenesis

- Hormonal control of germ cell development and steroidogenesis

- Sperm biology

- Basic female reproductive biology and fertilization

- 2) ***Clinical evaluation and management of male infertility***

Fellows are expected to learn how to appropriately evaluate and manage infertile couples. An understanding of the treatment algorithm (including the application of assisted reproduction) is expected. Fellows will be expected to give formal presentations on various clinical topics during the fellowship.

- 3) ***Surgical aspects of andrology***

Fellows are expected to develop the basic surgical skills (with emphasis on microsurgical skills) to perform microsurgical varicocelectomy, microsurgical vasectomy reversal (including vaso-epididymostomy) and various techniques of sperm retrieval (including percutaneous sperm retrieval and microdissection testicular sperm extraction).

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### **RESEARCH and ACADEMIC OBJECTIVES:**

Fellows are responsible for undertaking a minimum of two research (clinical and/or basic) projects under the supervision of Drs. Zini, Chan and/or Carrier. These projects will be submitted for presentation and publication. Fellows will also be given the opportunity to write book chapters in selected topics in Andrology.

Clinical and basic research interests at McGill include varicoceles, vasectomy reversal, sperm function evaluation (including sperm DNA integrity, semen oxidants) and genetics of infertility.

Fellows are required to attend weekly research rounds at the research laboratory of Dr. Armand Zini. This will expose the fellows to the scientific thought process used in the development of basic and clinical research projects.

### **CLINICAL AND TEACHING RESPONSIBILITIES:**

Fellows are responsible for attending all male infertility clinics (with Drs. Zini, Chan and/or Carrier). Fellows will also be responsible for assisting during male infertility-specific surgeries (this responsibility will be shared 50:50 with the rotating urology resident). It is expected that during a 3-month block, any given urology resident rotating with one of the Andrology fellowship supervisors will be assisting on 6 - 10 Andrology surgical cases (the fellow will be assisting on a similar number of cases [6-10] during the same period). Exceptionally, the fellow will be given priority for some of the more complex cases (specifically, vaso-epididymostomy).

For all other surgical procedures (i.e. non-andrology), the rotating resident(s) will be given priority. Fellows will also assist in the teaching of residents and students.

Fellows will be asked to share the “on call” duties with the McGill Urology residents. The “on call” frequency will be in accordance with the FMRQ guidelines ([www.fmrq.qc.ca](http://www.fmrq.qc.ca)).

### **ELIGIBILITY:**

Candidates for the fellowship must be graduates of a recognized Medical School and must have completed their urology residency at a recognized University.

Candidates need to be fluent in English and/or French.

### **FUNDING:**

Candidates should secure their own funding for the duration of the fellowship. Candidates are encouraged to apply (with the assistance of one or more of the co-supervisors) for external funding through an established agency (e.g. FRSQ, Kidney foundation, CIHR, AFUD). Candidates enrolled in a 2-year research fellowship may also apply for funding through the Surgical Scientist Program at McGill University. For more information regarding the amount and acceptable sources of funding please visit the link at [http://www.medicine.mcgill.ca/postgrad/admission\\_fellowships.htm](http://www.medicine.mcgill.ca/postgrad/admission_fellowships.htm)

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