

Infertility/Andrology Fellowship Training Program Department of Urology

TABLE OF CONTENTS

	Section	Page
I	Introduction	2-3
II	General Objectives	3
III	Specific Objectives	4
IV	Admission requirements	5
V.	Structure of training program	5
	A. Duration	
	B. Training Capacity	
	C. Faculty	
VI.	Program Content	5-6
VII	Responsibilities of Fellows	6-7
VIII	Evaluation and Promotion	7
IX	Leaves and Holidays	8
X	Completion	8

Infertility/Andrology Fellowship Training Program

I. Introduction

Infertility/Andrology is a subspecialty of Urological surgery that involves the management of male-factor infertility and sexual dysfunction. In Saudi Arabia, there is a significant number of infertile/impotent men that is expected to increase over the next generations, especially with such high prevalence of metabolic syndrome and Diabetes Miletus. In addition, the international prevalence of infertility is increasing and it is estimated that 10-15% of couples will present for infertility treatment. Many aspects of male-infertility and Andrology require special expertise and skills for proper management, requiring advance training that is undertaken after proper residency training program.

King Faisal Specialist Hospital and Research Centre (General Organization) [KFSH&RC] is the largest tertiary care centre in Saudi Arabia, accepting referrals for Infertility/Andrology from all over the Kingdom. Furthermore, the IVF centre at KFSH&RC is well known in the middle east region by its highest IVF cycle numbers and his dedicated reproductive gynecologists and embryologists, which together, provide state of the art infertility treatments. Also, the pre-genetic genetic diagnosis (PGD) program at KFSH&RC provides opportunistic window to diagnose and treat genetic diseases among Saudi people.

In this context and to address the need for competent Andrologists in the Kingdom, as well to take advantage of the precious material available at KFSH&RC, the Infertilty/Andrology fellowship training program will be established.

II. GENERAL OBJECTIVES

The proposed Infertility/Andrology fellowship at King Faisal Specialist hospital & Research center is a two years program that comprises clinical and research learning skills. The fellow will work under direct supervision of fellowship-trained andrology experts: Prof Said Kattan and Dr Naif Alhathal. This fellowship is designed for candidates interested in academic Andrology, and is particularly geared towards general urologists to become competent and acquire all necessary clinical/surgical skills in male infertility and sexual dysfunction to serve the community. The fellow may also spend a 3-months elective rotation with IVF gynecologists/Embryologists to gain a better understanding of female reproductive system and assisted reproductive techniques

III. Program specific objectives:

To learn the concepts and procedures involved in the biology of reproduction, management of male infertility/sexual dysfunction, and Andrology. This learning process will be obtained through active participation in clinical rounds, outpatient clinics and all aspects of Andrology surgeries. In addition, candidates will be comprehensively involved in a wide spectrum of male-factor infertility issues, as expected from busy IVF program in a tertiary hospital like King Faisal Specialist Hospital and Research Center. The learning objectives also include:

- ➤ Basic principles of spermatogenesis, hormonal control of sperm production and sperm biology.
- > An understanding of the basic techniques sperm retrieval, evaluation and tissue processing, recognition of basic testicular pathology, and knowledge of pathologic prognostic factors
- ➤ Learning basic microsurgical procedures like vasoepididymostomy, microdissection testicular sperm extraction.
- > Physiology of erectile dysfunction
- Clinical and surgical aspects for management of male sexual dysfunction By the end of two years, the fellow is expected to independently diagnose and treat malefactor infertility, sexual dysfunction and be a leader of academic training in his area.

Research Objectives:

The fellow is expected to learn how to design and conduct clinical +/- basic research in the field of Andrology. In addition, candidates will write clinical research proposal, present abstracts in Andrology/urology meetings and publish manuscripts under direct supervision of Pro Said Kattan and Dr Naif Alhathal. By the end of two years, fellows are expected to publish 4 clinical and/or basic science manuscripts.

IV. ADMISSION REQUIREMENT

Candidates must have completed residency training in Urology. Applicants should possess a Saudi Specialty Certificate or must have at least passed the written examination and registered for the final parts. Other candidates must possess an equivalent certification.

Candidates must have successfully completed a personal interview by members of the department. Three recent letters of recommendation and a sponsorship letter should be submitted.

V. STRUCTURE OF TRAINING PROGRAM

A. **Duration**. The Infertility/Andrology fellowship program is two years in duration. An optional one-year may be offered to meritorious fellows to undertake clinical research

in the subspecialty. This additional year of training may be spent at KFSH&RC (Gen. Org.) or abroad

- B. Training capacity. One fellow per year, maximum of two fellows at two levels.
- C. Mentors: Prof. Said Kattan, MD; Dr Naif Alhathal, MD, MS.c

VI. PROGRAM CONTENT

VII. Rotation

In addition to the main rotations in Infertility/Andrology, the fellow might also rotate in: IVF gynecology clinics and minor procedures
IVF and Embryology laboratories
Elective rotation in international IVF centre

There will be a total of 8 weeks holiday (4 weeks/year)

VIII. Operative Duties:

Number of main operative days is 2 days per week

Number of minor procedures in IVF is 3 days per week

The fellow is also expected to provide outpatient and inpatient medical care to patients of the team.

A. Clinics

The fellow should cover the two Andrology/IVF clinics and a third IVF/infertility clinic in IVF Centre.

IX. RESPONSIBILITIES OF FELLOWS

- A. The fellow will be responsible for the care of all Infertility/Andrology patients admitted to Urology service:
 - Morning and afternoon rounds
 - Following patient's progress
 - Decision making under the guidance of attending consultant
 - Participation in surgical procedures
 - Documentation (progress notes, discharge summaries, medical reports)
- B. The fellow will attend 3 Infertility/Andrology clinics per week.
- C. The fellow will perform minor sperm retrieval procedures in IVF 3 times per week under supervision.
- D. The fellow should actively participate in all educational activities related to Infertilit/Andrology.

- E. The fellow should actively participate in urological oncology research, present scientific papers in national and international conferences and contribute to publication in peerreviewed journals.
- F. The fellow will participate in the surgical procedures of Infertility/Andrology patients.
- G. The fellow will be responsible for teaching undergraduate medical students, Urology and general surgery residents rotating in Urology.
- H. The degree of responsibility will gradually increased through the period of training from the first to second year of fellowship.

VIII. Evaluation and Promotion

The fellow's level of competence and performance will be evaluated at a frequency determined by the Fellowship Postgraduate Education Committee and in the manner as detailed in the Policy for Fellowship Training Program. A self-assessment examination covering the different topics in the subspecialty will be given at the end of the first and second years of fellowship training. Fellows will be evaluated by participating faculty for each of the rotations in the program. In addition to this, an overall evaluation will be done by faculty to assess whether the fellow has met the goals for the curriculum and skills acquisition. The program director will meet with the fellow on 6-monthly basis to provide performance feedback. At the end of fellowship, the fellow should get a satisfactory evaluation by both mentors, Prof.Said Kattan and Dr Naif Alhathal to be eligible to graduate and get his certificate. A fellow's advancement from year to year is contingent upon professional performance and personal growth. The criteria for promotion are as enumerated in the Policy for Fellowship Training Program.

IX. LEAVES AND HOLIDAYS

Regulations governing leaves and holidays are as stipulated in the Policy for Fellowship Training Program.

X. Completion:

A certificate of fellowship training at KFSH&RC (Gen. Org.) will be awarded upon satisfactory completion of the requirements of the program.