

**Syllabus as drafted by Dr.Prakash Trivedi with  
Dr.Hema Diwakar & Dr.Duru Shah  
Certificate course in Gynaecological Endoscopy &  
Minimal Access Surgery with ICOG ~ FOGSI**

**Dr. Prakash Trivedi's National Institute of Laser & Endoscopic  
Surgery & Aakar IVF Centre, 1,2,3, Gautam Bldg., Opp. Balaji Temple,  
Tilak Road, Ghatkopar (E), Mumbai – 400 077**

**Application Form for 6 months Certificate Course**

**A. Overview**

1. Gynaecological Endoscopy & Minimal Access Surgery has advanced rapidly in last two decades & there is a growing need to have Gynaecologists who are member of FOGSI, a comprehensive yet extensive training in this field to have a complete knowledge of the subjects, enhance their skills to a level to actually be able to perform simple to moderately advanced Gynaecological Endoscopic Surgery systematically in a center which is properly equipped with the infrastructure of instruments & equipments for safe Endoscopic Surgery.
2. Centers of excellence in Endoscopic Surgery backed up by adequate teaching personnel, Audiovisual facilities, library of Books, DVD's of high educational value, with inanimate lab, pelvitrainer, hysterotrainer, Endosuturing & knotting, dry lab along with a good number of Live Gyn. Endoscopic surgery to give full exposure to the person keen to have the training.
3. The details of the Training Course are mentioned & course ends with a 2 hours Theory & one hour Practical Exam taken by an ICOG & FOGSI recognized Expert in the field of Gyn. Endoscopy.

**B. Particulars of Institution**

- |                        |  |
|------------------------|--|
| 1. Name of Institution | <b>Dr. Prakash Trivedi's<br/>National Institute of Laser &amp;<br/>Endoscopic Surgery &amp;<br/>Aakar IVF Centre</b> |
| 2. Address             | 1,2,3, Gautam Bldg., Opp. Balaji<br>Temple, Tilak Road, Ghatkopar (E),<br>Mumbai – 400 077                           |

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3. Name of the Department desiring to conducting the program      Department of Gynaecological Endoscopy & Minimal Access Surgery

## **C. Particulars of Programme**

### **Certificate course in Gynaecological Endoscopy & Minimal Access Surgery**

#### **Duration of the Course:**

The duration of the course would be for a period of 6 months. The period is divided to give the candidate increased responsibility systematically.

#### **Objectives of the Programme:**

The candidate at the end of the training will acquire skill, full knowledge of advanced technology & shall be able to:

1. Perform basic to moderate level of Gynaecological Endoscopy & Minimal Access Surgery pertaining to his/her field of speciality.
2. Adapt various technologies of minimal invasive therapy that supplement each other and act together to decrease patient morbidity.
3. Perform safe laparoscopic, hysteroscopic & minimal access surgeries.
4. Appreciate the benefits, limitations and complications of the newer techniques.
5. Be aware of various instruments ~ equipments and their applications that are coming into vogue in the field of minimal invasive surgery.
6. Detect and manage complications that may occur with these types of surgeries.

7. Practice,ethical and evidence based medicine.
8. Develop communication skills to present papers, lectures etc. at various platforms.
9. Physiological & Kinetic changes associated with Pneumoperitonium for short or long duration needed for Laparoscopic Surgery & also the changes related to uterine distension media for Hysteroscopic surgery.
10. Basic knowledge of the anaesthesia & multiparameter monitoring related to basic to Advanced laparoscopic & hysteroscopic surgery.
11. Role of diagnostic Laparoscopy, Microlaparoscopy, Hysteroscopy, Microhysteroscopy & contact Hysteroscopy or Gynaecological pathologies & conditions which are correctable by Laparoscopy along with Intrauterine pregnancy like Ovarian Cyst, concurrent ectopic pregnancy, Appendectomy etc. conserving uterine pregnancy & reducing chances of abortion.
12. A comprehensive details of pathologies correctable by Endoscopic Surgery like Endometriosis, Fibroids and Adhesions etc.
13. A complete knowledge of all instruments & equipments used for laparoscopic & hysteroscopic surgery along with proper sterilization, proper usage & proper maintenance of the same for effective & continuous functioning for safety.
14. A complete knowledge of Electrocautery & Electrosurgery, the new energy sources, vessel sealing devices, harmonic scalpel,lasers along with surgical or technical risks, complications & management of the same.
15. A full working knowledge of alternative procedures for endometrial ablation, thermal balloon techniques etc.
16. Two work station regularly available for Laparoscopic inanimate exercises, Hysterotrainer, Endosuturing lab. Given at discretion of Teacher. Adequate amount of hours of training & practice should be filled in a log book signed & supervised by the teacher.
17. A thorough clinical evaluation with adequate sonographic & hormonal assay levels for clinical correlation to give proper treatment to the patient.
18. After 6 – 8 weeks of exposure to Live surgery, adequate knowledge & reading the trainee will scrub with the teaching personnel as second & later first assisting surgeon to get hands on tissue feeling & confidence to operate independently later.

19. A log book with proper record of full management of Laparoscopic & Hysteroscopic surgical cases which includes 60 cases in total.
20. A complete knowledge with literature data & centers own data for Fertility Enhancing Endoscopic Surgery & also when not to do Endoscopic Surgery for a given patient.
21. One subject can be taken by the delegate as a research activity or a comparative data analysis related to Laparoscopic or Hysteroscopic surgery or MIS in SUI/Prolapse.
22. A proper knowledge & live surgery observation of Laparoscopic & alternative methods of treatment of stress urinary Incontinence & prolapse & pelvic floor defect.
23. Experience & expertise in Endoscopic, minimal access & open surgery for various Gynaecological pathology & conditions affecting Women's health.
24. A proper knowledge with complete hands on experience of Laparoscopic sterilization with fallope rings & also cases with bipolar coagulation with small tubal segment excision confirmed on Histopathology & also video recorded.
25. Experience & knowledge of medicolegal & Ethical aspects of Gynaecological Endoscopic & Minimal Access Surgery.
26. Research, statistics & audit of success, morbidity & mortality if any.
27. Role & place of laparoscopic Microsurgery theoretical, practical & comparative knowledge with skill enhancement.
28. Optimum knowledge of crisis management in Gynaecological Endoscopic & Minimal Access Surgery.
29. Adequate knowledge to interact, discuss and learn from teachers, colleagues on all finer aspects of Gynaecological laparoscopic surgery.
30. Full details of post Endoscopic surgical care, follow-up advice.
31. Knowledge of future technology like Robotic surgery, NOTES, Telemedicine.
32. The trainee on finishing a 6 months phased course in Gynaecological Endoscopic & Minimal Access Surgery apart from getting the Certificate continues to expand further.

33. The trainee has agenda chalked out by the division of basic understanding for first 2 months, then next 2 months proper hands on training & later refining the skill & techniques
34. The purview of Gynaecological Endoscopic & Minimal Access Surgery is wide but few centres of excellence in India with teaching facility can be more useful.

The end point for this course is that the person attending has a definite complete knowledge, skill to do the Gynaecological Endoscopic & Minimal Access Surgery in set up properly equipped.

There can be 2 ICOG delegates for Endoscopic & Minimal access surgery training which would be acceptable to us.

### **Course Contents:**

This would include the following:

1. The theoretical basis of various kinds of laparoscopic surgeries.
2. Knowledge about specialized instrumentation and their maintenance.
3. Details about the various operative procedures.
4. Indications, limitations of procedures and contra-indications based on evidence based medicine.
5. Use of computers and various software's to maintain surgical audit, prepare presentations, maintain website browse the net, to perform digitization of videos and edit them and use of telemedicine and virtual reality.
6. Evaluation of data based on surgical audit.
7. Topics which includes ethical, legal and social responsibilities of surgeons.

The various topics that would be covered in detail include:

#### **I. Basic laparoscopy**

1. History of laparoscopic surgery.
2. Basic instrumentation.
3. Operating room layout and trouble shooting.
4. Anaesthetic considerations.
5. Laparoscopic Space Access and Physiological Significance
6. Gasless Laparoscopy
7. Sterilisation and Disinfection in Laparoscopy

8. Principles of Laparoscopic Haemostasis
9. Laparoscopic Tissue Approximation
10. Role of Laparoscopic Ultrasonography
11. Retrieval System in Minimal Invasive Surgery
12. Complications of Laparoscopic surgery
13. Laparoscopy during Pregnancy
14. Strategies for Laparoscopic Diagnosis of Malignancy
15. Laparoscopic Surgery for various Gynaecological conditions.
16. Less Invasive Laparoscopy & alternative treatments.
17. Role of Laparoscopy in Abdominal Pain Syndromes
18. Hysteroscopy & Hysteroscopic Surgeries

## **II. Gynaecological Endoscopy & Minimal Access Surgery**

1. Diagnostic Laparoscopy
2. Laparoscopic Sterilization
3. Laparoscopic Adhesiolysis
4. Laparoscopic salpingostomy and fimbrioplasty
5. Laparoscopic management of ectopic pregnancy
6. Laparoscopic microsurgical tubal anastomosis
7. Laparoscopic management of ovarian cysts
8. Laparoscopic treatment of ovarian endometriomas
9. Laparoscopic management of tubo-ovarian mass
10. Polycystic ovaries, surgical management
11. Laparoscopic uterine nerve ablation
12. Laparoscopic surgery for pelvic pain
13. Laparoscopic myomectomy
14. Laparoscopic hysterectomy
15. Laparoscopic assisted vaginal hysterectomy
16. Laparoscopic supracervical hysterectomy
17. Laparoscopic colposuspension
18. Laparoscopic repair of enteroceles and pelvic floor defects.
19. Laparoscopic treatment of advanced endometriosis
20. Role of Laparoscopy in Gynaecological malignancy
21. Hysteroscopic surgery for Intrauterine septum, adhesions, polyps, fibroids & tubal block
22. Hysteroscopy Endometrial ablation & resection
23. Microlaparoscopy & Microhysteroscopy
24. Urinary Incontinence & pelvic floor defects minimal access & new mesh surgery

## **Skills**

The candidate will be given an opportunity to observe (O), assist surgeries (A), perform with assistance (PA) and perform independently (PI) in various cases and the minimum participation of the candidate will be as per the table mentioned below:

<b>Procedure</b>	<b>Category</b>	<b>Number</b>
Diagnostic Laparoscopy	O	10
Diagnostic Laparoscopy	A	10
Diagnostic Laparoscopy	PA	5
Diagnostic Laparoscopy	PI	5
Laparoscopic Sterilization	PA	5
Laparoscopic Sterilization	PI	5
Ectopic pregnancy/ Salpingectomy	A	5
Ectopic pregnancy / Salpingectomy	PA	5
Ovarian Cystectomy	A	5
Ovarian Cystectomy	PA	5
Endometriosis	A	5
Endometriosis	PA	5
LAVH	O	5
LAVH	A	5
LAVH	PA	5
TLH	O	10
TLH	PA	5
Ovarian Drilling	PA	10
Ovarian Drilling	PI	10
Hysteroscopic Surgery	O	15
Hysteroscopic Surgery	PA	20
Hysteroscopic Surgery	PI	15
Advanced Gynaec Surgery	O	50

## **Training methods and site of training:**

The training will be imparted at Dr. Trivedi's National Institute of Laser & Endoscopic Surgery & Aakar IVF Centre, 1,2,3, Gautam Bldg., Opp. Balaji Temple, Tilak Road, Ghatkopar (E), Mumbai – 400 077.

There will be regular training sessions for the candidates, as follows:

1. Lectures
2. Video demonstrations
3. Seminars and Symposia
4. Panel discussions
5. Ward rounds and Case presentations
6. Journal club
7. Presentations of paper in Conferences.

8. Publication in important journals
9. Project Work
10. Practical training in inanimate trainers, computerized modules, virtual reality modules
11. Assisting live surgeries
12. Performing surgeries under supervision

## 1. Lectures:

### a) Didactic Lectures:

Selected common topics will be discussed during the first few months of the course and most of them will be introduced to the candidate to enable him increase his productivity during the course. These would include:

- 1) Bio-statistics
- 2) Use of library
- 3) Research Methods
- 4) Communication Skills etc.
- 5) Use of computers

### b) Integrated Lectures:

These are a combination of multidisciplinary talks given by experts in the respective fields the intention being that we need to react with our interdisciplinary colleagues and work with them.

These would include:

- 1) Emergency surgeries
- 2) Management of Multiple complications
- 3) Management of Multiple Pathological conditions

## 2. Video Demonstrations

There will be a series of lectures based on DVD's demonstrations of various laparoscopic surgeries. This will be from the vast compilation of DVD's (> 100's laparoscopic , hysteroscopic & minimal access surgeries performed by various gynaecological endoscopic surgeons of international repute). Several points will be discussed during these sessions, which include:

- 1) The operative procedure details
- 2) Problems that would be encountered during the surgeries
- 3) Dealing with different situations and pathologies
- 4) Various approaches to a given problem
- 5) Different techniques of surgery that can be adapted
- 6) Proper usage of various instruments and energy sources

## 3. Seminars and Symposia:

This will be held once in 3 month. The PG students are invited to attend and actively participate in discussion. The candidate will present on various topics at least twice in 6 months. There will be evaluation of the candidate based on his participation and contribution for the seminar.

#### **4. Panel discussion:**

This will be conducted along with Trainees of other departments as and when felt necessary. This would also be considered for the continuous evaluations of the candidate.

#### **5. Ward Rounds & Case Presentations:**

The candidate will be doing rounds of all in-patients in the department of Gynaecological Endoscopic & Minimal Access Surgery this will be teaching rounds with faculty in the department. Candidates will be entering relevant data in their logbooks every day. There will be case presentations by the candidate during the rounds.

#### **6. Journal Club:**

There will be journal clubs held once in 3 month. All the specialists and students attend and actively participate in discussion. The candidate will present from the allotted journal(s) of selected articles and also from literature search which obtained from Internet and other sources. There will a minimum of 2 presentations from each candidate during the certificate course. There will be continuous assessment of the candidate during the journal club presentation and discussion.

#### **7. Inter Departmental Meetings:**

There would be regular meetings with radiologists, pathologists, general surgeon, urologist, intensivists and anaesthesiologists.

#### **8. Teaching Skills:**

The candidate will be participating in the various meets that are organized at the hospital.

#### **9. Presenting Papers in Conferences :**

The candidate will be encouraged to attend conferences and workshops in laparoscopic, hysteroscopic & minimal access surgery during the course & to present as many papers & videos at these conferences.

## **10. Publications:**

All facilities will be given to acquire and record data and to send articles for publications in journals of international repute. Each candidate will be encouraged to send in at least one article for publication in a certificate course.

## **11. Practical training**

- (a) **Pelvi-trainer sessions:** Practical training will be given on inanimate Pelvitainers. Various types of exercises are taught in these trainers, the actions of which mimic the various steps of surgical procedures.
- (b) **Hysterotainers & Simulators for different pathologies**
- (c) **Virtual reality training module optional.**
- (d) **Assisting surgeries:** The candidate will be given opportunities to assist a number of surgeries which are mentioned in the roster. The assisting surgeries would include various surgical procedures, operating through the other ports other than what the surgeon is using and coordinating by holding the camera.
- (e) **Performing surgeries under supervision:** Based on the performance and the active involvement of the candidate he/she will be allowed to perform certain operations under supervision by senior faculty. The type of surgery and number of surgery will be decided upon based on the expertise that the candidate has acquired.

## **EVALUATION**

The evaluation of learning outcome of trainees consists of :

### **Assessment Plan during the Course:**

There will be continuous monitoring and regular assessment of all academic activities of the candidate.

Formal evaluation is done by the staff of the department based on participation of students in various teaching / learning activities. The evaluation is structured on the basis of checklists that evaluate these various parameters.

The following aspects will be assessed :

- (i) **Personal Attitudes** – It is pertinent to assess and guide the candidate in facing stressful conditions in the ward & operating room, to assess the

candidate's ability to work as a team and to evaluate the leadership qualities, and coordinating abilities.

- (ii) **Acquisition of Knowledge** – This will be done by evaluation of the candidate's performance during the journal club, seminars, symposia, interactive conferences and discussions during the ward rounds .


**CHECK-LIST FOR EVALUATION OF SEMINAR PRESENTATIONS**

<b>Parameters Evaluated</b>	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1. Relevant publications consulted					
2. Cross references consulted					
3. Completeness of Preparation					
4. Clarity of Presentation					
5. Understanding of subject					
6. Ability to answer questions					
7. Time scheduling					
8. Audio-Visual aids					
9. Overall Performance					

**CHECK LIST FOR EVALUATION OF CLINICAL WORK IN WARD / OPD**

<b>Parameters Evaluated</b>	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1. Regularity of attendance					
2. Punctuality					
3. Interaction with colleagues					
4. Maintenance of case records					
5. Case presentation during rounds					
6. Investigations work up					
7. Bedside manners					
8. Rapport with patients					
9. Counseling patient's relatives					

10. Over all quality of Ward work					
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- (iii) **Clinical and operative skills** – This would include an evaluation of the candidate’s sincerity, punctuality ability to diagnose correctly handling of the patient and relatives, the speed and effectiveness of the decisions taken in the outpatient department and the wards. The candidate’s operative skills will be assessed based on performance in the operating room, and standard tests given in inanimate pelvi-trainer, hystero-trainer , minimal access models session and assisting during surgery.

**CHECKLIST OF OPERATIVE SKILLS**

<b>Parameters Evaluated</b>	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1. Pre-operative Preparation					
2. Setting up of Equipment					
3. Creation of Pneumoperitoneum					
4. Port placement					
5. Patient positioning					
6. Co-ordination with operating team					
7. Camera focusing					
8. Proper usage of instruments					
9. Overall Dissection skills					
(a) Dexterity of movements					
Dissection, Haemostasis					
(b) Maintaining clear field of vision					
(c) Usage of energy sources					
(d) Suturing & knotting					
10. Safety measures during surgery					
Handling crisis					

- (iv) **Teaching skills** – A close watch and guidance will be provided regarding the skills in communicating and teaching during the presentations that the candidates would make.

**CHECK-LIST FOR EVALUATION OF TEACHING SKILL**

<b>Parameters Evaluated</b>	Poor 0	Below Average 1	Average 2	Good 3	Very Good 4
1. Communication of the purpose					
2. Evokes audience interest					
3. The introduction					
4. The sequence of ideas					
5. Use of practical examples					
6. Speaking style					
7. Attempts audience participation					
8. Summary of main points at the end					
9. Asks questions					
10. Answers questions					
11. Effectiveness of the talk					
12. Uses AV aids appropriately					

### **Log book**

Prime importance will be given to maintaining a proper record of events of teaching and experiences that the candidate has obtained in a log book. Internal assessment will be based on the evaluation of the log book. The record will include academic activities as well as the presentations and procedures carried out by the candidate.

### **Assessment for certification**

***Eligibility:*** The Teacher certifies the candidate's competence and performance, the ICOG ~ FOGSI will grant permission for assessment. The assessment will be conducted by Dr. Trivedi's National Institute of Laser & Endoscopic Surgery & an external ICOG ~ FOGSI examiner.

***The written assessment:*** There shall be a written assessment at the end consisting of at least two question papers. Each paper shall carry 100 marks. One paper of MCQ's & 2<sup>nd</sup> of 5~6 short question. Dr. Trivedi's National Institute of Laser & Endoscopic Surgery will conduct the Paper setting and valuation for the examination. Marks will be assigned & the performance is informed to the ICOG ~ FOGSI.

***Practical Exam:*** There shall be one external examiner, generally by an external examiner appointed by the ICOG ~ FOGSI. 1 hour maximum 100 marks

***Certification:*** Based on the recommendations made by the examiners, successful candidate would be awarded the Certificate scroll by ICOG ~ FOGSI. In case of

unsatisfactory completion, the trainee would be given another chance to appear before the examiners (6 months) later. However, the Certificate course training at Dr. Trivedi's National Institute of Laser & Endoscopic Surgery for such a candidate ceases at the end of the duration of the course.

## **Fee structure**

The candidate will be asked to pay Rs.50,000/- by Demand draft in favor of FOGSI with prescribed application form selecting a centre to the ICOG ~ FOGSI at the time of admission towards the fee for the ICOG ~ FOGSI Certificate course in Gynaecological Endoscopic & Minimal Access Surgery. After deducting 20 % of the fees towards FOGSI-ICOG, 80% will be deposited in favor of the Teacher / Teaching Centre.

The institution will not collect any fee from the candidates.

No stipend will be paid to the trainee by Dr. Trivedi's National Institute of Laser & Endoscopic Surgery & Aakar IVF Centre

## **Criteria for selection**

The candidate applying for Certificate course in Gynaecological Endoscopic & Minimal Access Surgery should have successfully completed

- M.D./DGO/FCPS in Obstetrics & Gynaecology in MCI approved place or D.N.B. in Obstetrics & Gynaecology in NBE approved place
- Should be a member of FOGSI

## **Accommodation facilities**

At present there is no accommodation facility given at the institution for the trainees. The trainee is required to make his/her arrangements for accommodation.

## **Request of Dr. Trivedi's National Institute of Laser & Endoscopic Surgery & Aakar IVF Centre for accreditation for this programme**

Dr. Trivedi's National Institute of Laser & Endoscopic Surgery & Aakar IVF Centre has been an institute of high repute to establish a center for Gynaecological Endoscopic & Minimal Access Surgery.

The Institute is equipped with the best of facilities required for performing Gynaecological Endoscopic & Minimal Access Surgery (Annexure 1).

The Institute has been involved in training gynaecologists from all over the country in Gynaecological Endoscopic & Minimal Access Surgery (Annexure 2).

The Institute has organized several conferences and workshops at the national and international level to spread Gynaecological Endoscopic & Minimal Access Surgery.

The Institute has been involved in major research projects and has developed virtual reality trainers for training in Gynaecological Endoscopic & Minimal Access Surgery. This is the first of its kind in the country with a touch screen multilingual educational module for all aspects of the speciality.

The faculty at the Institute has presented several research papers in Gynaecological Endoscopic & Minimal Access Surgery and has received several awards in national and international conferences. Many books are published & educational DVD's are made by Dr. Prakash Trivedi & others in the Institute.

There has been a constant effort by the Institute to spread the knowledge of Gynaecological Endoscopic & Minimal Access Surgery and to further their effort there is a need to start such a programme.