



# BLDE UNIVERSITY

## Fellowship in Minimal Access Surgery 2016-17

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**BLDE UNIVERSITY**

[Declared as Deemed to be University u/s 3 of UGC act, 1956, vide notification No.F.9-37/2007-U.3(A)]

The Constituent College

**SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL & RESEARCH CENTRE**

Smt. Bangamma Sajjan Campus, B. M. Patil Road (Sholapur Road), Vijayapura - 586103, Karnataka, India.

University: Phone: +918352-262770, Fax: +918352-263303, Website: [www.bldeuniversity.ac.in](http://www.bldeuniversity.ac.in), E-mail: [office@bldeuniversity.ac.in](mailto:office@bldeuniversity.ac.in)

College: Phone: +918352-262770, Fax: +918352-263019, E-mail: [bmpmc.principal@bldeuniversity.ac.in](mailto:bmpmc.principal@bldeuniversity.ac.in)



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## SHRI B. M. PATIL MEDICAL COLLEGE, HOSPITAL AND RESEARCH CENTRE

BLDEU/REG/FMAS/2016-17/689/11

July 02, 2016

### NOTIFICATION

#### Sub: Curriculum for Fellowship in Minimal Access Surgery

- Ref: 1. Minutes of the meeting of the 20<sup>th</sup> Academic Council of the University held on 29<sup>th</sup> April, 2016  
2. Minutes of the meeting of the 36<sup>th</sup> BoM of the University held on 18<sup>th</sup> June, 2016

The Board of Management of the University is pleased to approve the Curriculum for Fellowship in Minimal Access Surgery at its 36<sup>th</sup> meeting held on June 18, 2016.

The curriculum shall be effective from the Academic Session 2016-17 onwards, in the constituent College of the University viz. Shri B. M. Patil Medical College, Hospital and Research Centre, Vijayapura.

  
REGISTRAR  
REGISTRAR  
BLDE University, Vijayapura.

Copy to:

- The Secretary, UGC, New Delhi
- The Dean, Faculty of Medicine & Principal
- The Vice Principal
- The Medical Superintendent
- The Controller of Examinations
- The Chairman, Committee for Medical & Allied Courses
- The Professor & HoD, Dept. of Surgery
- The Coordinator, IQAC
- PS to Hon'ble Vice-Chancellor

Smt. Bangaramma Sajjan Campus, Dr.B.M.Patil Road (Solapur Road), Vijayapura-586103. Karnataka. India

University : Phone : +91 8352-262770, Fax : +91 8352-263303, Website : www.bldeuniversity.ac.in, E-mail : office@bldeuniversity.ac.in  
College : Phone : +91 8352-262770, Fax : +91 8352-263019, Website : www.bldeuniversity.ac.in, E-mail : bmpmc.principal@bldeuniversity.ac.in

## **Vision and Mission**

- *Committed to provide globally competitive quality medical education.*
- *To provide the best health care facilities in this backward region, in particular, to socially disadvantaged sections of the society.*
- *Constantly striving to become a reputed research University with world-class infrastructure, latest tech-tools for teaching/research and adopting global best practices.*

## **CURRICULUM FOR FELLOWSHIP IN MINIMAL ACCESS SURGERY**

### **GOAL:**

The goal of fellowship in Minimally invasive surgery is to train a General Surgeon (M. S. Gen. Surgery) to be capable and competent to

1. Perform and practice minimally invasive surgery
2. Practice MIS in diligent and ethical manner.
3. Continue to update with the advances
4. Be a team member and leader and in training and sharing knowledge and skills with learners.

### **PREAMBLE:**

The practice patterns of General and GI Surgery has changed significantly in the last two decades as a result of the increasing use of rigid and flexible Endoscopes for both diagnostic and therapeutic techniques.

These changes are occurring from time to time and continue rapidly with increasing the performance of Advanced Laparoscopic procedures.

Residents and General Surgeons who have completed their training in conventional open surgeries and are entering the practice of general surgery must be familiar with and must be well trained and educated in these areas of surgery.

Laparoscopy should be significant part of their practice and with time will become more important and more widely used.

### **OBJECTIVES:**

Gaining laparoscopic skills is very important. Skill in conventional surgical procedure does not necessarily confer skills in Laparoscopic surgery. The course is aimed at bridging this gap and is formulated with the following objectives in mind.

### **KNOWLEDGE**

1. To learn the principles of Laparoscopic surgery. **(K)**
2. To learn the indications, contra-indications and limitations of MIAS and various procedures. **(K)**
3. Anesthesia in laparoscopic surgery. **(K)**
4. Learning about prosthetic meshes and fixation devices. **(K)**

## **KNOWLEDGE & SKILLS**

1. To learn about specialized Laparoscopic equipments and instrumentation. **(K&S)**
2. Sterilization and maintenance of instruments and video equipments. **(K&S)**
3. Trouble shooting in MIAS. **(K&S)**
4. Electro surgery and other newer energy sources. **(K&S)**
5. To learn about tissue morcellators and organ retrieval systems. **(K&S)**
6. To know about the complications and its managements in MIAS. **(K&S)**

## **SKILLS**

1. To master the tactile sensation, altered hand and eye co-ordination due to the length and design of instruments and the absence of three dimensional depth perception due to two dimensional representation of the three dimensional abdominal cavity. **(S)**
2. To perform abdominal insufflations using Veress needle **(S)**
3. Basic and advanced skills in Endo-knotting and intracorporeal suturing techniques. **(S)**
4. To perform laparoscopic procedures on live animal models in the purposeful, wet laboratory. **(S)**
5. Learn to perform on human patients.
6. Documentation, storage data and presentation. **(S)**

## **ELIGIBILITY**

**M.S. (General surgery) or DNB in General Surgery** recognised by appropriate authority

**Duration of course : 1 year**

**The planned schedule is module based with 4 modules of 3 months/12 weeks each**

1. 3 Months Basics in Laparoscopy
2. 3 Months Ward postings
3. 3 Months Hands on / Video presentation
4. 3 Months Internship

### 1. **Basics in Laparoscopy [Module 1]**

Introduction to Lap, Pre requisites  
Introduction to Instruments / access technique  
Energy source  
Sterilization + Washing  
Anatomy / Wet dissection  
Understanding Laparoscopic Physiology

Use of Lap Trainer / Animal module  
Complications  
Anaesthesia  
Documentation/Video editing

**Practicals**

Veress needle insertion (access technique)  
Port position  
Patients under supervision  
Hand Eye coordination practice  
Demonstration of Energy source utilization

} On Manikins, Endotrainers &

**2. Ward Postings [Module 2]**

Regular workup of Patients,  
Preparation for OT,  
Attend Wards, rounds and assist all Minimally Invasive Surgeries  
Logbook entry and maintenance  
Seminars, Journals & Case presentations

**3. Hands on video editing recording/Documentation [Module 3]**

Assisting all minimally invasive surgeries  
Performing under Guidance  
Video Editing Theory Class/Practicals  
Documentation  
Post operative care

**4. Internship [Module 4]**

Allied Department postings for one week each to assist Minimally invasive surgeries and learn know how related to the speciality  
Anaesthesia, Urology, Endoscopy, Gynaceology.

**COURSE CONTENT**

A. General Principles:

1. Equipment set up and trouble shooting
2. Patient preparation
3. Anesthesia and Monitoring
4. Access to abdomen
5. Creating pneumoperitoneum

6. Abdominal wall lift devices
7. Principles of laparoscopic haemostasis
8. Principles of Electosurgery

**TROUBLE SHOOTING:**

Laparoscopic procedures are inherently complex. Many things can go wrong. The surgeon must learn sufficiently about all equipments which can trouble shoot and to solve it. Common problems to be learnt are:

1. Cause of Poor insufflations
2. Reason for excessive pressure for insufflations
3. Reasons for inadequate lighting
4. Reasons for too bright lighting
5. Reasons for loss of picture on monitors
6. Reasons for poor quality pictures /fogging / haze
7. Reasons for flickering electrical interference
8. Reasons for inadequate cauterization/inadequate irrigation and suction

**Basic Module in MAS FOR GENERAL SURGEONS:**

1. Diagnostic Laparoscopy
2. Laparoscopic Appendectomy
3. Laparoscopic Cholecystectomy
4. Laparoscopic Adhesiolysis

**Advanced module in MAS FOR GENERAL SURGEONS:**

1. Laparoscopic Hernioplasty
  - Direct –TEP REPAIR
  - Indirect – TAPP REPAIR
2. Laparoscopic Perforation Closure
3. Vagotomy and GJ (Stapling and Hand Suturing)
4. Nissen Fundoplication for GERD and Hiatus Hernia
5. CBD Exploration using C-Arm control
6. Laparoscopic Splenectomy
7. Assisted large and small bowel surgeries
8. Liver resections
9. Pancreatojejunostomy and Cystogastrostomy for Pseudocysts of pancreas.
10. Laparoscopic Rectopexy for prolapsed rectum.
11. Laparoscopic APR/Right and left colectomy
12. Transhiatal Esophagectomy
13. Gastrectomy for Ca. Stomach
14. Meckels Diverticulectomy
15. Obesity surgery and Metabolic surgery (optional)

**Syllabus**

## Section 1

1. Chronological advances in Minimal Access Surgery
2. Laparoscopic Imaging Systems
  - Laparoscopic Trolley
  - Imaging systems
  - Light source
  - Light cable
  - Telescope
  - Laparoscopic video monitor
  - Television systems
  - 3-D vision
  - Invention of ideal shadow in laparoscopic surgery
  - 3-D video monitors
3. Laparoscopic Equipments and Instruments
  - Insufflations Systems
  - Suction/Irrigation systems
  - Energy source systems
  - Laparoscopic working equipment
  - Port Access instrument
  - Laparoscopic hand instrument
  - Outer Sheath of hand instrument
  - Instrument for sharp dissection
  - Types of Laparoscopic scissor
  - Endoknife/Scalpel
  - Coagulation in dissecting electrode
  - Needle holder
  - Knot pusher
  - Laparoscopic clip applicator
4. Sterilization of laparoscopic instruments
  - History of sterilization
  - Legislation in sterilization
  - Ultrasound technology for cleaning
5. Anaesthesia in Laparoscopic Surgery
  - Evolution and preparation of patient
  - Physiological changes during laparoscopy
  - Regional
  - General
  - Local
  - Intraoperative complication
6. Abdominal access techniques



- Closed access
  - Open Access
  - Introduction of veress needle
  - Primary trocar insertion
  - Pneumoperitoneum in special conditions
  - Entry in cases of morbid obesity
  - Port closure techniques
7. Principles of laparoscopic port position
- Primary port position
  - Secondary port position
  - First decide the target
  - Port position in various surgeries
  - Drawbacks of incorrect port position
8. Laparoscopic dissection techniques
- Types of laparoscopic dissection
  - Blunt dissection
  - Sharp dissection
  - Scissor dissection
  - High frequency electrosurgical dissection
  - Use of diathermy hook
  - Ultrasonic dissection
  - High velocity water jet dissection
  - Laser dissection
  - Cryotherapy and radiofrequency ablation
9. Laparoscopic tissue approximation techniques
- Laparoscopic suturing and knotting
  - Laparoscopy needle
  - Roeder's knot
  - The Meltzer slip knot
  - The Tayside knot
  - Using a pre-tied knot
  - Extra-corporal knot for continuous structure
  - Cat eye stone
  - Laparoscopic internal suturing
  - Instrumentation
  - Continuous suturing
  - Application
  - Interrupted sutures
  - Techniques to assist in control of bleeding
10. Hand Assisted Laparoscopic Surgery
- Hand Port devices
  - Omniport

- Indication of HALS
  - Advantage of HALS
  - Limitation of HALS
  - Lapdisc hand access device
  - Warning and precautions
  - Future prospect of HALS
11. Tissue retrieval techniques
- Endobags
  - Colpotomy
  - HALS
  - Morcellator
12. Laparoscopic Port Closure Techniques
- Withdrawal on instruments on Ports

## SECTION 2

1. Laparoscopic cholecystectomy
  - Advantages of laparoscopic approach
  - Exposure of gall bladder and cystic duct
  - Adhesiolysis
  - Dissection of cystic pedicle
  - Intraoperative USG
  - Complication of Lap Cholesystectomy
  - Lap chole and CBD injury
  - Type of CBD injury
  - How to avoid injury
2. Laparoscopic CBD exploration
  - Intraoperative Colangiography
  - Laparoscopic USG
  - Laparoscopic extraction of CBD stones
  - Procedure
3. Laparoscopic Appendectomy
  - Laparoscopic anatomy
  - Advantages of Lap Appendectomy
  - Alternate port and theatre setup
  - Risk factors
4. Laparoscopic repair of inguinal hernia
  - Laparoscopic Anatomy
  - Indications

- Advantages of laparoscopic approach'
- Disadvantages of Open method
- Transabdominal pre-peritoneal repair
- Procedure of TAPP
- Total Extra peritoneal repair
- Advantages of TEPP
- Disadvantages of Pre peritoneal repair
- Laparoscopic repair of femoral hernia
- Complications of lap Hernia repair
- Intra operative complications and precautions
- Postoperative complications
- Post operative recovery
- Recurrence
- Causes of recurrence
- Recommendations

#### 5. Laparoscopic Ventral hernia repair

- Laparoscopic Anatomy
- Operative Procedure
- Choice of Mesh
- Surgeries
- Alloderms
- Proceedure
- The second technique
- Complications
- Mesh Placement and Fixation
- Bowel injury
- Adhesion
- Infection
- Seroma
- Post operative Pain
- Obesity
- Recurrence

#### 6. Laparoscopic repair of Hiatus Hernia

- Symptoms of type 2 Hiatus hernia
- Operative procedure of giant Para oesophageal hernia
- Recommendations to avoid complications

#### 7. Laparoscopic repair of Duodenal Perforation

- Laparoscopic approach and advantages
- Operative technique
- Discussion

8. Laparoscopic Fundoplication
  - Pathophysiology
  - Operative Technique
  - Procedure
9. Sleeve Gastrectomy
  - weight loss
10. Laparoscopic Splenectomy
11. Laparoscopic management of hepatopancreatic diseases
  - Technique
  - Laparoscopic Liver resection
  - Hepatic resections
  - Laparoscopic pancreatic surgery
  - Pseudocyst drainage
12. Diagnostic laparoscopy
  - Indications
  - Contraindications
  - Laparoscopic Anatomy
  - Role of Laparoscopy in Ascites
  - Diagnostic Laparoscopy
13. Laparoscopic Small bowel surgery
  - Laparoscopic resection of small bowel
  - Ileocelectomy
14. Laparoscopic Colorectal Surgery
  - Sigmoidectomy
  - Low anterior resection
  - Abdominoperitoneal resection
  - Hartmann reversal
  - Resection rectopexy
  - Wells or martex procedure
  - Tips and tricks
15. Laparoscopic Adhesiolysis
  - Contraindications
  - Laparoscopic adhesiolysis

### SECTION 3

1. Laparoscopic Sterilisation
  - Laparoscopic anatomy
  - Contraindications
  - Bipolar coagulation
  - Falope ring application
2. Laparoscopic Ovarian Surgery

- Laparoscopic Ovarian Anatomy
  - Laparoscopic management of Ovarian cyst
  - Oophorectomy
  - Contraindications
3. Laparoscopic tubal surgery
    - Laparoscopic tubal anatomy
    - Operative procedure
  4. Laparoscopic Management of ectopic Pregnancy
    - Ectopic Pregnancy
    - Discussion
    - Laparoscopy vs laparotomy in treatment
  5. Laparoscopic Surgery in Pregnancy- Precautions and Complications
    - Physiological changes in pregnancy
    - Fetal considerations
    - Effects of pneumoperitoneum
    - Laparoscopic procedure
    - Criteria for patient selection
    - Advantages of laparoscopy in pregnancy
    - Discussion
  6. Laparoscopic Management of Endometriosis
    - Peritoneal Implants
    - Resection of Ovarian Endometriosis
    - Genitourinary endometriosis
    - Diaphragmatic Endometriosis
  7. Laparoscopic Hystrectomy
    - Laparoscopic Anatomy of Uterus
    - Classification
    - Discussion
  8. Laparoscopic Myomectomy
    - Procedure
    - Removal of Myoma
  9. Laparoscopic management of Stress incontinence
    - Pathophysiology
  10. Minimally Invasive Sling Operation for Stress incontinence
    - Tension free vaginal tape
    - Contraindications of tension free vaginal tape and transobturator tape
    - Warnings and Precautions
  11. Laparoscopic Sacral Colpopexy
    - Indications
    - Operative procedure
    - Vesicovaginal fistula repair

- Technique
12. Essentials of Hysterectomy
- Indications
  - Contraindications
  - History
  - Delivery of devices
  - Distending Media
  - Fluid monitoring
  - Excessive fluid absorption

#### SECTION 4: Laparoscopic Urology

1. Urethral Injury and Laparoscopy
  - Urethral injuries
  - Frequency of urethral injury
  - Level of urethral injury
  - Prevention of urethral injury
  - Recognition of urethral injury
2. Laparoscopic Urologic Procedure
  - Laparoscopic Nephrectomy
  - Varicocelectomy
  - Retroperitoneal node dissection
  - Management of lymphocele
  - Ureterolysis
  - Ileal conduit
  - Pelvic Lymphadenectomy

#### SECTION 5: Pediatric Laparoscopy

1. Laparoscopic Pediatric Surgery
  - Laparoscopy in infants and children
  - Laparoscopic repair in pediatric hernia
  - Paediatric Urology
  - Laparoscopy for impalpable undescended testis
  - Other laparoscopic pediatric urological procedures

#### SECTION 6: Miscellaneous

1. Other Minimal Access Surgical Procedures
  - Two port cholecystectomy
  - Two port repair of ventral hernia
  - Historical perspective
  - Surgical technique
  - Minimal access neck surgery
  - Minimal access surgery in orthopaedics

- Arthroscopic Surgery in sports related injury and other pathology
  - Minimal access surgery in orthopaedic trauma
  - Spine surgery and Arthroscopy
  - Bone endoscopy and tumours
2. Minimal Access Bariatric Surgery
    - Laparoscopic treatment of morbid obesity
    - Sleeve gastrectomy
  3. Complications of Minimal Access surgery
    - Anaesthetic and medical complications
    - Haemorrhagic complications
    - Gastrointestinal complications
    - Injury to bladder
    - Neurologic Injury
    - Dissection in thermal injury
    - Incisional hernia
    - Infection
  4. Role of training in minimal access surgery
    - Training objectives needs and means
    - Present training in laparoscopy
    - Learning curve in laparoscopy
  5. Future of minimal access surgery
    - Minimal access techniques
    - Natural orifice transluminal endoscopic surgery.

### **Teaching learning methods**

The academic activities of the program include:

1. Regular academic sessions:
2. Theory Classes, Journal Presentations,
3. Case discussion and seminars
4. Paper presentation
5. Audit/ Project/Research

6. Conferences/CME's/Live workshops
7. Wet lab/ simulator, use of endotrainers

**Assesment/Evaluation:**

**FORMATIVE** - To assess the skill on simulator every 3 months with viva, presentation (JC, seminars, problem based cases, videos)

**SUMMATIVE**- At the end of one year

**Log books**- The log books are to be submitted for monthly evaluation of the progress and to evaluate the learning curve.

**Exit exams**- The degree is awarded after a final exit examination, at the end of one year training period.

**THEORY**

Theory paper 1: Basic Sciences-100 marks

Theory paper 2: Systemic chapters related with MIS-100 marks

2 long questions of 20 mark each and 6 short questions of 10 marks each

**PRACTICALS**

- |                |   |          |
|----------------|---|----------|
| 1. long cases  | - | 40 marks |
| 2. Short cases | - | 20 marks |

Total marks =	Theory	-	200
	Practicals	-	100
	Total	-	300

**EXAMINERS**

TOTAL	-	03
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2 internal examiners & 1 external examiner

**RESULTS**

Passing minimum 50%

I<sup>st</sup> class- more than 65%

Less than 50% is considered as fail

**LIST OF LIBRARY BOOKS FOR REFERENCES**

Books

1. Bailey & Loves' Short Practice of Surgery 26<sup>th</sup> edition
2. Text book of practical laparoscopic surgery by R. K. Misra, 3<sup>rd</sup>edn. Jaypee Publishers
3. Zucker's laparoscopic surgery. 4<sup>th</sup>edn



4. Palanivelu's Text book of Laparoscopic Surgery Vol I&II
5. Palanivelu's Atlas of Laparoscopic Surgery
6. Advanced laparoscopic surgery by Katkhouda 2<sup>nd</sup>edn. Springer publication
7. SAGES Manual of basic laparoscopy and advance laparoscopy 3<sup>rd</sup> edn, Springer publication.

**JOURNALS:**

1. Jr. Of MAS
2. Jr. Of JIAGES
3. World Jr. of Lap. Surgery
4. BJS
5. Annals of surgery
6. IJS
7. AJS
8. Jr. of SAGES

## **RESOURCES REQUIRED FOR CONDUCTING THE COURSE**

### **INFRASTRUCTURE**

- A. Text books on MIAS written by leading and experienced Authors
- B. Educational tools such as Video tapes /CD ROMS
  - Simulators for Endo – Training
  - Box trainers to master the skills
  - Endo trainer rooms with adequate space and good air-conditioning facility to work long hours in the simulators so the trainee can avoid fatigue.
  - Endo-cameras mounted on a special stands with the monitors
  - Special hand instruments to learn the hand and eye co-ordination, depth perception and tactile sensation.
- C. The training should be structured throughout with clearly defined targets to be met after specified intervals. An education plan should be drawn up in consultation with the trainees at the beginning of each attachment and progress should be monitored regularly, by means of log book.

### **SETTING UP OF A LAPAROSCOPIC UNIT:**

#### **INFRASTRUCTURE**

- Room with Computer
  - Library
  - Seminar Room
  - Skills Lab
  - OT with Laparoscopic surgery Instruments
  - Demonstration Instruments
  - Animal Laboratory
- A. ROOM LAYOUT AND EQUIPMENT POSITION:
- General considerations include the size of operating room space, location of doors, outlets for electrical and anesthetic equipments.
  - To determine the optimum position and orientation for the monitor placement.
  - If the room is large, the normal position for the operating table will work well for laparoscopy (30/30).
  - Small operating rooms will require diagonal placement of the operating table and proper positioning of laparoscopic accessory instrumentation around the operating table.
  - All equipment check list helps to ensure that all items are available and minimize delays in MIAS.

## **THE BASIC INSTRUMENTS NEEDED FOR SETTING UP THE UNIT:**

- Electrical table with leg separation facility.
- Two video monitors. One for the surgeon and another for the assistants and team (optional).
- Suction and irrigation apparatus.
- Electrosurgical unit with proper grounding.
- Pad equipped with current monitoring system.
- Cart to house the laparoscopic equipments or pendants.
- Light sources (Halogen or Xenon).
- Electronic insufflators or Pneumoflator.
- Fibro-optic cable.
- Camera Systems
  1. Single chip camera system
  2. Three chip camera system
  3. High definition camera systems
- Video recorder for Data (or) computer picture capturing systems connected to the monitors or camera consol.
- Telescopes
  - 10 mm 30° 10 mm ○ 5 mm 30° 5mm 45° 10 mm
- Colour printer for documentation.
- X-Ray Unit for advance intra operative Cholangio graphy
- CO2 Cylinders

## **Laparoscopic accessory instruments for basic and advanced surgeries**

1. Atraumatic graspers
2. Locking toothed and jawed graspers
3. Needle holders
4. Dissectors - curved and right angle
5. Bowel grasping forceps
6. Babcock clamp
7. Veress needle
8. Trocars – 5mm and 10 mm
9. Metzenbaum scissors and Straight scissors
10. Hook with diathermy attachment (L-Shaped)
11. Fan retractors - 10 mm and 5mm
12. Specialized retractors (optional (Cusheri liver retractor))

## **Vessel Sealing Systems**

- Monopolar electrocautery dissection tools.
- Bipolar dissection and coagulation tools
- Harmonic scalpel

- Ligasure (optional)
- Basket containing
- Clip appliers
- Endoscopic stapling devices
- Endoloops
- Endoscopic suture material
- Extra trocars
- Additional tables should be available
- For hot saline
- Irrigating solutions

And open surgical instruments (Conventional surgery) for emergency conversion to open from laparoscopy, should be kept ready and separate from Lap Instruments.

### **WET LAB**

The live animal lab should be attached to the hospital which should have the following:

1. Preferably air-conditioned
2. A regular tilting table
3. A cart for keeping the following equipments
  - Camera
  - Light source
  - Fibro optic cables
  - Diathermy should be placed separately in another trolley to avoid electrical disturbances.
  - Suction /Irrigation Apparatus
  - CO<sub>2</sub> cylinders
  - CO<sub>2</sub> insufflators.
  - Mask anesthesia equipments (Basic Boyle's) for animal anesthesia
4. Pre-Medication chamber for animals
  - Drugs /Anaesthetic agents
  - Post surgery - Recovery area
  - IV Fluid stands
  - Monitors
  - Helper's for washing the hand instruments
  - Disinfectants
5. For procedures requiring anaesthesia, qualified Vet. Anaesthetist / Surgeon
  - Fees : To be decided by the committee
  - Stipend: To be decided by the committee
  - Faculty: Staff of dept of General Surgery, OBG, Urology involved in regular MIS

COURSE CO. ORDINATOR: Dr. M. B. Patil

### Staff members

- Dr. P. A. Sasanur
- Dr. HemanthKumar. M.
- Dr. Girish. K. Kullolli
- Dr. Vijaya. D. Patil
- Dr. V. S. Kunderagi
- Dr. Neelamma
- Dr. Girija Hanjagi
- Dr. Mrs.Gobbur

### **Support Staff**

- Clerk
- Servant