SOCIETY OF LAPAROENDOSCOPIC SURGEONS

PROGRAM REQUIREMENTS FOR A POST-GRADUATE

FELLOWSHIPS IN SPECIALIZED MINIMALLY INVASIVE AND ROBOTIC SURGERY(SMIRS)

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I. Introduction

The SLS Fellowship in Specialized Minimally Invasive and Robotic Surgery (SMIRS) is an intensive training endeavor preparing the graduate for advanced specialized minimally invasive and robotic surgery. SLS formed the SMIRS training program because of its commitment to provide an individualized educational opportunity for physicians who are interested in advancing the surgical field, while pursuing a career in minimally invasive and robotic surgery and increasing their expertise. While minimally invasive surgery Fellowships are both respected and coveted, the American Council for Graduate Medical Education (ACGME) does not yet formally recognize these minimally invasive surgical Fellowships.

The mission of the SMIRS Program is to provide a training for gynecologists, urologists, and general surgeons who have completed their residency and seek to acquire additional knowledge and surgical skills in a specialized surgical discipline or disease process so they may: serve as a scholarly and surgical resource for the community in which they practice; have the ability to care for patients with complex surgical disease using specialized minimally invasive techniques; establish sites that will provide leadership in advanced endoscopic surgery; and further research in minimally invasive surgery.

II. Educational Objectives

The Educational Objective is to provide an organized educational program with guidance and supervision to facilitate personal and professional development while advancing MIS. There is a focus on evidence—based medicine, anatomical principles, instrumentation, operative laparoscopy, robotic—assisted minimally invasive surgery, operative and natural orifice surgery. The Fellowship:

- Provides experience in preoperative, operative, and postoperative care for patients undergoing advanced minimally invasive and robotic procedures
- Support and encourage Fellow participation in research
- Provides Fellows with the opportunity to maintain continuity of care for their patients through office visits and home call.
- Supports open communication and feedback between the program and the preceptee throughout the year
- Provides exposure to a sufficient number of surgical cases to advance operative skill and surgical judgment.
- Provides a working environment that is optimal for Fellow education and patient care.

III. Recruitment and Application Process

a. Applicant Eligibility Criteria:

1. ACGME or AOA-accredited Residency Training
   - Certificate or letter of completion with dates of training
   - Letter of recommendation from Program Director

2. International Medical Graduates (IMGs)
   - Doctor of Medicine diploma (or its equivalent) without reservations (translation of degree into English by certified translator and notarized if necessary)
   - Successfully passed USMLE
   - Current and valid ECFMG (Education Council of Foreign Medical Graduates) certificate.
   - Demonstrated written and spoken fluency in English language

b. Selection:

- The application must be complete (including letters of recommendation) by September 1st
- The applicant must meet eligibility requirements in order to be considered for interview.
- Individual program preceptors will contact the applicant via letter, telephone, or email of their decision to offer an interview on or before October 1st.
- The Interview process and timing will be individualized per program.
- Acceptance may be offered or a rolling basis or by March 1st of the starting academic year.
- Contract, orientation schedules, dates and requirements are sent to the new Fellows by the individual programs as they become available.

IV. Program Curriculum

The curriculum will be comprised of didactic teaching, clinical experience, research and self-learning. The curriculum will vary depending upon the specific site of the Fellowship and State and hospital licensing and credentialing regulations as may be applicable.

a. Education will include structured teaching, conferences, seminars, and didactic instruction. The Fellow's schedule and responsibilities may be structured to allow attendance at national conferences.

b. The clinical experience will include the volume and variety of cases to fulfill the Educational Objectives. The Fellow must be capable of performing all procedures relevant to the clinical practice of the subspecialty. The Fellow should be supervised in all clinical activities, including surgical procedures.

c. Research training should include structured basic science, translational, clinical, or surgical research to improve understanding of the latest scientific surgical techniques, promote the

Fellow's academic contributions to the specialty and further the ability of the Fellow to be an independent investigator. The Fellow is expected to present his/her work at the SLS MISWeek or other SLS educational program as may be offered. The scholarly contribution can be a video, oral or poster presentation. The expectations and integration of other research endeavors will vary with each program.

V. Fellow Evaluation & Requirements

Upon successful completion of the Fellowship, each Fellow will receive a certificate of completion from SLS noting the completion of an SMIRS training experience.

Requirements for graduation will include:

1. Satisfactory clinical and surgical training as outlined by the individual program.
2. Completion of at least eleven months of training.
3. The completion and submission of a detailed procedure log to SLS at the conclusion of the Fellowship experience
4. Presentation of a scientific contribution at the SLS meeting. The contribution can be a video, oral or poster presentation.
5. Fellow evaluation of their educational Fellowship experience and Fellowship director at the conclusion of the Fellowship experience.

VI. Policies

a. Anti-Harassment

View a complete description of the Anti-Harassment policy here

b. Stipend and Benefits

Fellows may be provided a stipend. This is negotiable between the Fellow and Program Director.

The following benefits are required:

- The Fellowship must provide Fellows with professional liability coverage and all pertinent information regarding this coverage. Liability coverage must include legal defense and protection against awards from claims reported or filed after the completion of the program, if the alleged acts or omissions of the Fellows are within the scope of the program.

The following benefits are recommended:

- Health and Disability insurance
- Research associated costs (IRB, equipment, publication or presentation related fees)
- Travel to the SLS annual meeting

Appendix 1:

I. Sample Surgical Competency List—Gynecology
(Edit to reflect your individualized program and specialty field of study)

Case Type	Understand	Understand and Perform	Supplemental Competency	Pre-Fellowship Competency
Laparoscopic Adhesiolysis				
Mild/moderate				
Severe				
Enterolysis				
Laparoscopic Ovarian Surgery				
Cystectomy				
Adnexal detorsion				
Oophorectomy				
Ovarian drilling				
Oophoropexy				
Ovarian cryopreservation				
Ovarian remnant				
Ovarian transposition				
Laparoscopic Tubal Surgery				
Tubal ligation				
Salpingectomy				
Salpingoscopy				
Neosalpingostomy				
Tubal reanastomosis				
Paratubal cystectomy				
Linear Salpingostomy				
Retroperitoneal Dissection				
Ureterolysis				
Uterine artery ligation				
Space of Retzius dissection				
Presacral neurectomy				
Gastrointestinal and Urinary Procedures				
Ureteral stenting				
Hydrodistension				
Proctosigmoidoscopy				
Cystoscopy				
Office-based Endoscopy				
Diagnostic hysteroscopy (rigid/flexible)				
Operative Hysteroscopy				
Vaginoscopy				

Transvaginal hydrolaparoscopy				
Laparoscopy				
Hysteroscopy				
Diagnostic				
Hysteroscopic Sterilization				
Pregnancy complications - retained POC				
Foreign bodies				
Lysis of synechia - mild, moderate				
Lysis of synechia – severe				
Metroplasty				
Polypectomy				
Myomectomy Type's 0- I - or less than 2cm				
Myomectomy Type II - or greater than 2cm				
Tubal cannulation				
Endometrial Ablation				
Rollerball/endomyometrial resection				
Global endometrial ablation				
Endometriosis Surgery				
Cul de sac dissection				
Segmental bowel resection and anastomosis				
Treatment of superficial endometriosis				
Ureterolysis				
Ureteral reanastomosis				
Ureteral neocystotomy				
Bladder surgery for endometriosis				
Bowel surgery for endometriosis				
Presacral neurectomy				
Appendectomy				
Resection of deep infiltrating endometriosis				
Treatment of extra-pelvic sites endometriosis				
Pelvic Floor Reconstructive Surgery				
Paravaginal Repair				
Mesh and conventional for utero-vaginal prolapse				
Mid-urethral sling				

Colposuspension				
Sacrocervicopexy				
Sacrocolpopexy				
Sacrocolpoperineopexy				
Uterosacral suspension				
Sacrospinous ligament suspension				
Fistula repair				
Hysterectomy +/- BSO				
Laparoscopic Supracervical Hysterectomy				
Total Laparoscopic Hysterectomy				
LAVH				
Trachelectomy				
Vaginal hysterectomy				
Myomectomy				
Laparoscopic myomectomy				
Laparoscopic-assisted myomectomy				
Non-surgical treatment of fibroids				
Laparoscopic uterine artery occlusion				
Pregnancy Related				
Diagnostic/Operative Laparoscopy				
Laparoscopic cerclage				
Correction of congenital anomalies				
Resection of rudimentary uterine horn				
Correction of other lateral and vertical fusion defects				
Creation of neovagina				
Repair of specific conditions				
Cystotomy				
Enterotomy				
Vascular injury				
Ureteral injury				
Oncology Surgery				
Omentectomy				
Pelvic and aortic lymph node dissection				
Radical Hysterectomy with lymph node dissection				

Primary or interval debulking for ovarian cancer				
Imaging				
Transvaginal sonography				
Sonohysterography				
Intraoperative sonography				
Hysterosalpingography				
Transabdominal sonography				
Pain Management				

II. Sample Surgical Case List—General Surgery
(Edit to reflect your individualized program, specialty and field of study)

Case Type	Understand	Understand and Perform	Supplemental Competency	Pre-Fellowship Competency
General Surgery				
Ventral hernia repair includes Lysis of Adhesions				
Sutured Hiatal Hernia included with Laparoscopic Adjustable Band or Gastric Bypass				
Heller Myotomy includes Dor, Nissen, or Toupet				
Paraesophageal Hernia repair includes Dor, Nissen, or Toupet				
Esophagectomy includes Gastric resection, pyloromyotomy, and vagotomy				
Pancreaticoduodenectomy includes cholecystectomy, bile duct resection, pancreatic resection, and bowel resection				
Liver resections include cholecystectomy				
Colon resection includes colostomy or ileostomy				
Gastric resections include gastrojejunostomy, Roux-en-Y anastomosis, and intra-operative EGD's				
Lysis of Adhesions included with any procedure other than SBO				
Small bowel resection and ileostomy				
Paraesophageal Hernia Repair with				

Adjustable Band or Gastric Bypass				
Cholecystectomy with Hiatal Hernia repair, Band, Bypass, Ventral hernia repair				
Incarcerated ventral, inguinal, or femoral hernia repair and small bowel or large bowel resection				
Distal Pancreatectomy and Splenectomy				
Vagotomy with pylorotomy or antrectomy				
Biliary bypass and Gastrojejunostomy				
Esophagectomy with colon interposition				
Adjustable Band removal included with a Sleeve Gastrectomy or Gastric Bypass				
Intra-operative EGD included with Foregut and bariatric surgery				

III. Sample Surgical Case List—Urology
(Edit to reflect your individualized program, specialty and field of study)

Urology

Case Type	**Understand**	**Understand and Perform**	**Supplemental Competency**	**Pre-Fellowship Competency**
General Urology				
Cystoscopy				
Insertion of ureteral catheters/stents				
Retrograde pyelogram				
TUR of prostate				
Bladder biopsy				
Transurethral lithalopaxy				
Repair of uterovaginal fistula				
Ureterolysis				
Pveloplasty				
Ureteral anastomosis				
Total cystectomy (simple/radical)				
Suprapubic cystostomy				
Vesicourethropexy				
Cutaneous vesicostomy				
Meatotomy				
Orchiectomy				

Hydrocelectomy				
Vasectomy				
Implantation of artificial sphincter				
Nephrectomy				
Partial nephrectomy				
Retroperitoneal lymph node dissection				
Laparoscopic urological procedures				
Microsurgery				
Percutaneous nephrostomy / Access				
Percutaneous nephrolithotomy				
Ureteroscopy (rigid & flexible)				
Nephroureterectomy				

Appendix 2: SMIRS Reference Material

- Arizona Center for Endoscopic Surgery (2017). Advanced GI/MIS Clinical Fellowship Program. Tuscon, AZ, University of Arizona College of Medicine.
- Armitage, P., G. Berry, et al. (2009). Statistical methods in medical research. Malden, Mass. Blackwell Science.
- Baggish, M. S. and M. M. Karram (2011). Atlas of pelvic anatomy and gynecologic surgery. St. Louis, Mo., Elsevier/Saunders.
- Covens, A. (2009). Laparoscopic surgery for gynecologic oncology. New York, McGraw-Hill.
- Cutner, A. and Royal College of Obstetricians and Gynaecologists (Great Britain) (2011). Laparoscopic surgery for benign gynaecology, RCOG Press.
- Dizerega, G. S. (2012). New trends in reproductive medicine. [S.l.], Springer.
- Heneghan, S, Myers, J, Redan, J.A. et. al.: Society of American Gastrointestinal Endoscopic Surgeons (SAGES) Guidelines for Office Endoscopic Services. Surg Endosc. 2009 May; 23(5): 1125-9
- Jain, N. (2010). State of the art atlas of endoscopic surgery in infertility and gynecology. New Delhi, India, Jaypee Brothers Medical.
- Kupets, R. and A. Covens (2009). Laparoscopic surgery for gynecologic oncology. New York, McGraw-Hill Medical.
- Moore, D. S., G. P. McCabe, et al. (2012). Introduction to the practice of statistics. New York, W.H. Freeman
- Nezhat, C. (2011). Nezhat's History of Endoscopy: A Historical Analysis of Endoscopy's Ascension since Antiquity. Tuttlingen, Germany, Endo Press.
- Nezhat, C., F. R. Nezhat, et al. (2013). Nezhat's operative gynecologic laparoscopy and hysteroscopy. Cambridge; New York, Cambridge University Press.
- Norton, J., P. Barie, et al. (2008). Surgery: Basic Science and Clinical Evidence, 2nd Edition. New York, Springer.
- Pasic, R. and R. L. Levine (2009). A practical manual of laparoscopy and minimally invasive gynecology: a clinical cookbook. Abingdon, Oxon Boca Raton, Informa Healthcare;
- Schwartz, S. I. and F. C. Brunicardi (2010). Schwartz's principles of surgery. New York, McGraw-Hill, Medical Pub. Division.
- Traynor, M. P. (2011). Advances in laparoscopy and minimally invasive surgery. Philadelphia, Pa., Saunders Co.
- Tredwell, R. E. (2010). Ovarian cysts: symptoms, causes, and treatment. New York, Nova Biomedical Books.

- Resad P. Pasic, Ronald Leon Levine (2004). A Practical Manual of Hysteroscopy and Endometrial Ablation Techniques: A Clinical Cookbook. Taylor & Francis Publishers
- Wein, A., L. Kavoussi, et al. (2011). Campbell-Walsh Urology, 10th Edition. New York, Elsevier.
- Wetter, P. A. (2012). Prevention and Management of Laparoendoscopic Surgical Complications, 3rd Edition. Society of