General Surgery Residency Core Education Program
2012 - 2013 Academic Year

Department of Surgery

Penn State Milton S. Hershey Medical Center
Hershey, Pennsylvania

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Overview of the General Surgery Resident Education Curriculum

Statement of Intent:

The General Surgery Resident Educational Curriculum has been designed by the Surgical Education Committee as the foundation for all resident education within the department. This document, however, is not intended to be all-encompassing. There are too many educational activities within the department to list in a single, concise, document. This document is designed to provide the basic structure of group education within the department (schedules, learning objectives, lecture formats, resident teaching assignments, etc.) so that it is available to all residents and staff members.

The Education Curriculum is intended to be timely, interactive, and responsive to the suggestions of residents and staff. Your feedback about the programs covered herein and your suggestions for improvement are necessary to make this curriculum successful.

Electronic Resources:

All interns have access to the ACS Fundamentals of Surgery.
http://fsc.facs.org
All residents have access to SCORE (Surgical Council on Resident Education)
www.surgicalcore.org

Other *Optional Text:*	Surgery on Call, Leftor (4th Edition)
	Sabiston Textbook of Surgery (Online Edition)
	Greenfield's Surgery: Scientific Principles and Practice
	ACS Surgery: Principles and Practice (Online Edition)
	The Physiologic Basis of Surgery, O'Leary (4th Edition)
ABSITE Review Text:	The ABSITE review, Fiser (1st or 2nd Edition)

Available Online Textbooks/Resources:

The Department of Surgery has their own on-line library resource. Electronic books, journals, and important papers maybe accessed through http://harrell.library.psu.edu/surgery

Didactic Lecture Overview:

The majority of lectures within this schedule will be given by the attending staff of the surgical department and other departments within the hospital. As such, we have outlined the following resident requirements:

- Show up on time – lectures will begin promptly
- **If you plan to get food prior to sitting down, arrive 10 minutes prior to the start of the lecture. Everyone is expected to be seated at the scheduled start time.**
- Turn your pager off – pager coverage has been arranged for each service
- Sit down front – you are not fooling anyone by hiding in the back
- Show up prepared – the reading assignments were carefully selected for the lecture
- Be ready to interact – the lectures are intended to be interactive and engaging for the audience
- Provide us with feedback – you will have the opportunity to provide feedback to the lecturer. Please be constructive.

- When there is a change of rooms between lectures, be on time for the second lecture. There is generally another lecturer waiting for you for the second hour, please do not keep them there long.

Skills Sessions Overview:

The General Surgery Residency Skills Curriculum is based in large part on the American College of Surgeons (ACS)/American Program Directors in Surgery (APDS) Surgical Skills Curriculum for Residents Phase I We have added supplementary material in areas of particular interest/need.

Phase 1 of the curriculum has 20 modules. We will be covering most of them this year (although not all residents will participate in all modules). Modules contain both documents to read and videos to watch. Your main preparatory activities for these sessions will be reading and watching videos. You are expected to create your own account on the main curriculum site. (http://elearning.facs.org/login/index.php). This will allow you to access videos and readings PRIOR to the skills sessions.

Few of these modules are designed for senior surgical residents. We will again utilize the senior residents as facilitators for junior residents whenever appropriate. Teaching is a skill to be a skill that senior residents should develop during their training. We have added supplementary skills programs (including the ACS ultrasound for surgeons programs) as sessions for the senior residents to acquire new skills and to receive documentation of their technical abilities.

Learning Objectives for the skills sessions, while not outlined in detail in this document, will be provided prior to each of the skills session. They will be included as part of the assigned reading material for each of the skills sessions.

Verification of Proficiency:

Residents will be required to complete a verification of proficiency (VOP) examination for selected skills. VOP will involve the resident performing a specific skill (e.g. placing a central line in a mannequin) while an examiner completes a check list of required elements. Each of the skills requiring VOP will be formally taught in a skills session well in advance of the VOP exam. This will provide ample time for you to practice the skill required in preparation for the test session (see Resident Skills Curriculum below). The skills that a resident is required to become proficient in are level appropriate. Each level will have a separate set of required skill proficiencies. The completion of these tasks will be documented on proficiency cards. (See Residency Assessment Forms for samples)

Case - Based Learning

Case-Based Learning (CBL) introduces residents to clinical reasoning skills and how to approach a medical problem.

Goals of Case Based Learning include:

- Enhance the resident's motivation to learn on her/his own.
- Develop each resident's ability to recognize what she/he needs to learn.
- Develop each resident's ability to locate information and choose the best sources.
- Assist each resident in gaining a useful basic and clinical science knowledge base.
- Provide a real-life context around which each resident can organize her/his new knowledge.
- Activate and reinforce each resident's prior knowledge.
- Provide a setting for each resident in which new knowledge may be elaborated upon and basic science knowledge can be immediately applied to clinical problems.
- Develop each resident's clinical reasoning skills.
- Assist each resident with the development of skills necessary in working cooperatively and effectively with others.
- Assist each resident with the improvement of oral presentation skills.

The CBL Format:

Four individual cases – chosen at the discretion of the faculty/resident, formatted in the following sequence.

1. Short synopsis to include pertinent history and exam
2. Radiological and pathological images

Please do not include the diagnosis for any of the cases.

Each case should be followed by:

> "What are your differential diagnosis, most likely diagnosis, and treatment plan for this patient? Treatment plan should include preoperative evaluation and management, surgical procedure of choice, complications of operative and non-operative management, and postoperative management."

Junior residents will present the case and discuss the differential diagnosis.

Senior residents will discuss management.

All residents should be prepared to discuss the case.

Preparing for CBL Facilitation

1. Cases per Attending/Resident discretion – case scenarios and radiology/pathology adjuncts
2. Powerpoint presentations as needed for guidance with the radiology/pathology adjuncts
3. Directed questions to guide the discussion
4. Assigned groups – to be distributed via email prior to CBL
5. Submit the cases to Cindy Miller at least 1 week in advance for distribution to the residents
6. Time management per the facilitator

Surgical Education and Self-Assessment Program (SESAP) Review

- The goal of the SESAP presentation is to provide residents with a broad-based educational experience using evidence-based literature.
- A resident will be assigned to present SESAP questions that are relevant to the content of the previous didactic lecture.
  - The faculty member that presented the previous didactic lecture will be assigned to moderate the session and assist the resident.
  - The resident is responsible for contacting the assigned attending faculty member in advance to coordinate the questions to be presented.
  - If the audience response system is used, the presenting resident is encouraged to engage the audience in a discussion of why certain answers are correct, and why others are incorrect.
- Throughout the presentation the faculty moderator should summarize questions and review pertinent learning points.
- Additional references to specific questions may be provided as needed.

Accreditation Council for Graduate Medical Education (ACGME) Core Competency Lecture Series:

The Office of Graduate Medical Education sponsors a monthly lecture series based on the six core competencies as outlined by the ACGME, which are

- Patient Care: Resident must provide care that is compassionate, appropriate, and effective to the treatment of health problems and the promotion of health.
- Medical Knowledge: Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.
- Practice-based Learning and Improvement: Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices.
- Interpersonal and Communication Skills: Learn to provide effective information exchange and teaming with patients, their families, and professional associates.
- Professionalism: Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.
- Systems-based Practice: Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value

These lectures occur on the first Thursday of the month. Surgical residents are required to either attend the lecture series (if included in your weekly schedule) or to review the material online and take the online quiz. The online link is

http://www.pennstatehershey.org/web/residency/home/resources/competencies.

Residents are required to document attendance in person or online for all of the educational presentations.

Morbidity and Mortality Conference Overview:
Morbidity & Mortality (M&M) Conferences have a long tradition in the practice of surgery, having originated in the early 1900s with Dr. Ernest Codman at Massachusetts General Hospital in Boston.

The objectives of M&M conference are: to learn from complications and errors, to modify behavior and judgment based on previous experiences, and to prevent repetition of errors leading to complications. Conferences are not punitive and focus on the central goal of improving patient care. M&M conferences highlight recent cases and identify areas of improvement for clinicians involved in the case. They are also important for identifying systems issues (e.g., outdated policies) which affect patient care.

Resident attendance at M&M is **mandatory**. The presenting residents and staff will provide an overview of the learning points for each case. Both the case presentation and learning points for the case will be posted on the Angel website in the M&M Matrix section.

**M&M starts promptly on Wednesdays at 5 pm. Residents should be seated in the front and ready to listen at that time.

Grand Rounds:
Grand Rounds is a series of lectures of interest to the general surgeon. The lecture series consists of visiting professors, quality rounds, and research rounds.

Resident attendance at Grand Rounds is **mandatory** for all in-house residents (post-call residents should not return for grand rounds).

Educational Content

Sample Weekly Schedule

	General Surgery Residency Core Education Program and Conferences Sample of Weekly Schedule				
Time	Monday	Tuesday	Wednesday	Thursday	Friday
7:00 AM	Colorectal GI Tumor Board	Surg Onc Conference EGS Trauma Conference Vascular Conference	Peds Surg Teaching Conference Colorectal Pre Op	Protected Resident Education Time Including Didactic Lecture, Skills Session, Surgical Techniques, Journal Club	Trauma M&M Conference
8:00 AM		Vascular M&M Conference			
9:00 AM					
10:00 AM					
11:00 AM			Transplant Liver Meeting	Breast Conference	
12 Noon					
1:00 PM					Ped Tumor Board
2:00 PM					
3:00 PM				Transplant Kidney Meeting	
4:00 PM	Ped Surg Xray Conference		MIS/Bariatric Conference		
5:00 PM			M&M Conference	Surgery Grand Rounds	
6:00 PM					

Sample Monthly Calendar

JUNE 2012 SURGERY EDUCATION SCHEDULE

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 3 pm: MS III CP (Dr. Soleimani, LRD) 4 pm: MS III Lecture (Dr. Soleimani, LRD	2
3	4 7:30 am MS III Breast (Dr. Kass/Dr. Smith, LRD) 10:30 am: MS III ACLS Scenario/Airway Lab (Dr. Nielson, Sim Ctr) 1 pm: MS III Lecture (Dr. Sabat, LRD) 2:30 pm: MS III Lecture (Dr. Ruggiero, LRD) 4 pm: Chairman's Rounds (Dr. Dillon, LRD)	5 4 pm: MS III CP (Dr. Indeck, LRD) 4 pm: Resident Evaluation Review Meeting (C4832)	6 5 pm: M&M (LRA)	7 7 am: Chest injuries (Dr. Lazar, LRA) 8 am: R1 Cat Skills: Consult Resident Practicum (R2, Lab, R4, Sim Ctr Rms A & B) 8 am: R3 Skills: Trauma Chief Practicum (Non Cat R1, R5, Sim Ctr Bay C) 3 pm: MS III Lecture (Dr. Harpster LRD) 4 pm: MS III CP (Dr. Kaifi, LRD) 4 pm: Surgery Grand Rounds Lape Lecture Dr. Willey Risk-Reducing Mastectomy: Trends, Benefits and Surgical Aspects (Hosp Aud)	8 3 pm: MS III CP (Dr. Indeck, LRD) 4 pm: MS III Lecture (Dr.Soybel, LRD)	9
10	11 3 pm: MS III CP (Dr. Rogers, LRD) 4 pm: Surgery Education Committee Meeting (C4832)	12 3 pm: MS III Lecture (Dr. Carr, C4832) 4 pm: MS III CP (Dr. Saunders, LRD)	13 5 pm: M&M (LRB)	14 7 am: Abdominal Access (Dr. Rogers, Hosp Aud) 8 am: CBL (Dr. Augustin/Dr. Bello, Hosp Aud) 9 am: R1 Skills: Central Line/Chest Tube Refresher (Dr. Laufenberg/Dr. Wilson, Sim Ctr VR Rm) 9 am: R2/R3/LR: Resident Mtg (Dr. Dillon, C4637) 9 am: R4/R5 ST: Radical Neck Dissection (Dr. Andrews, Sim Ctr Debriefing Rm) 1-4 pm: MS III Shock Lab (Sim Ctr) 5 pm: Quality Grand Rounds (Hosp Aud)	15	16
17	18 3 pm: MS III Lecture (Dr. Laufenberg, LRD) 4 pm: MS III Lecture (Dr. McKenna, LRD)	19 3 pm: MS III Lecture (Dr. Gusani, LRD) 4 pm: MS III Lecture (Dr. Harpster, LRD)	20 3 pm: MS III Lecture (Dr. Lazar, LRD) 5 pm: M&M (LRD)	21 7 am: Hemorrhoids/Anal fissure; Anorectal abscess and fistulae (Dr. McKenna, Hosp Aud) 8 am: SESAP (Dr. Pastor, Hosp Aud) 9 am: R1 ST: Hemorrhoidectomy and banding of internal hemorrhoids (Dr. Messaris, C4832) 9 am: R2/R3/LR ST: Organ Procurement (Dr. Shah, Sim Ctr Rm A & B) 9 am: R4/R5 Self Study (C4637) 3 pm: MS III Lecture (Dr. Potochny, LRD) 4 pm: MS III Lecture (Dr. Kadry, LRD)	22 4 pm: MS III Lecture (Dr.Galvan, LRD)	23
24	25 1:30 pm: MS III Lecture (Dr. Castellani, LRD) 3 pm: MS III Lecture (Dr. Saunders, LRD)	26 1:30 pm: MS III Shock Lab Debriefing (Dr. Galvan, LRD) 3 pm: MS III Exit Interview and Review (Dr. Galvan, LRD)	27 5 pm: M&M (LRA)	28 7 am: Trauma Grand Rounds Craniectomy: History and Indications (Dr. Villanueva, LRA) 8 am: R1-R5: Journal Club (TBD, LRA) 5 pm: Dep't. of Surgery Faculty Mtg (LRA)	29 9 am: MS III Shelf Exam (LRA)	30

Intern Curriculum

Thursdays 7-10 AM – JULY / AUGUST

REQUIRED TEXTBOOKS

Primary Text:	Fundamentals of Surgery: On line Account
	SCORE: On line Account
Clinical Text:	ACS Surgery, Souba (online)
Basic Science Text:	The Physiologic Basis of Surgery, O'Leary (4th Edition)
Supplemental Text:	Surgery on Call, Leftor (4th Edition)

JULY 2012

Date	Time	Session	Facilitator	Module	Location
5-Jul	7am	Intro to Curriculum	Dillon		Hosp Aud
	8am	Suturing and Knot Tying	Juza/Wilson		Sim Ctr: Rm A/B
	9am	Fundamentals Of Surgery	James	Fluids/Electrolytes; Postop Oliguria/Fever	Sim Ctr: Rm A/B
12-Jul	7am	Mandatory GME Lecture	Beth Herman		Hosp Aud
	8am	Skills: Chest Tubes/Central Lines	Enomoto/Laufenberg		Sim Ctr: Rm 3/4; VR Rm
	9am	Fundamentals of Surgery	Erdahl	Arrhythmias; chest pain; SOB; hypotension	LR B
19-Jul	7am	Fundamentals of Surgery	Hansen	ICU Monitoring/ICU Drips	Hosp Aud
	8am	Pre-op assessment of cardiac, pulmonary risk and co-existing infection	Thompson (Robt)	Preoperative Evaluation and Perioperative Care	Hosp Aud
	9am	Skills: Chest Tubes/Central Lines	Juza/Geletzke		Sim Ctr: VR Rm/Skills Rm
26-Jul	7am	Professionalism	Dillon		Hosp Aud
	8am	Fundamentals of Surgery	Matsushima	Pain management/Nutrition	Hosp Aud
	9am	Resident Meeting	Dillon		C4637

AUGUST 2012

Date	Time	Session	Facilitator	Module	Location
2-Aug	7am	Core Competency: Sleep Deprivation	L Kass		Hosp Aud
	8:30am	Skills: Suturing/Knot Tying	Enomoto/Laufenberg		Sim Ctr: Rms 3/4
9-Aug	7am	Portal Hypertension & General Surgery Challenges	Kadry	Abdomen - Liver	Hosp Aud
	8am	Skills: Chest Tubes/Central Lines	Juza/Wilson		Sim Ctr: Rms 6/7; VR Rm
	9am	Fundamentals of Surgery	Pastor	Abdominal Pain/GI Bleeding	LR C
16-Aug	7am	Jaundice, Gall Bladder Polyps/Cancer, Liver Abscesses	Kimchi	Abdomen - Biliary	Hosp Aud
	9am	Fundamentals of Surgery	Hansen	Wound Management	Hosp Aud
23-Aug	7am	Principles and Practice of Patient Safety	Caputo		Hosp Aud
	8am	Your Surgical Career	Haluck		Hosp Aud
	9am	Resident Meeting	Dillon		C4637
Date	**Time**	**Session**	**Facilitator**	**Module**	**Location**
30-Aug	7am	GE Reflux; Barrett's Esophagus; Dysphagia	Lyn Sue	Alimentary tract - Esophagus	Hosp Aud
	8am	Fundamentals of Surgery	James	Altered Mental Status; Postop Nausea/Vomiting	Anteroom
	9am	Practice Basic Skills	Lab Residents		Sim Ctr: Skills Rm, Rms 3/4

Intern Curriculum Lecture Outline and Learning Objectives

Arrhythmias

1. Identify the following arrhythmias on EKG: A. fib, A. Flutter, V. Tach, V-Fib, 1st degree AV Block, 2nd degree AV Block (Types I and II), and 3rd degree AV block.
2. List 3 common causes of atrial fibrillation.
3. List 5 initial orders for evaluation and treatment of acute onset of Afib.
4. State the first-, second-, and third-line drug treatments for acute Afib.
5. Recognize that tachycardia with hypotension is a medical emergency.
6. State the information necessary to provide to the senior resident regarding a patient with acute onset Afib.

Chest Pain/Post-Op MI

1. State 5 questions to ask in the initial workup of a patient with acute onset of chest pain.
2. List 6 orders for the initial management of acute chest pain.
3. List 4 life-threatening diagnoses that could present as acute chest pain in the post-operative patient.
4. State the information necessary to provide to the senior resident regarding a patient with acute chest pain.

Shortness of Breath

1. List 8 questions to ask in the initial workup of a patient with acute onset of SOB.
2. List the first 3 steps in the evaluation and treatment of a hypoxic patient.
3. Recognize that any patient with SOB requires immediate bedside evaluation by a physician.
4. List 3 cardiovascular causes of SOB.
5. List 7 pulmonary causes of SOB.
6. State the information necessary to provide to the senior resident regarding a patient with acute SOB.

Fluids and Electrolytes

1. List the concentrations of electrolytes in lactated Ringer's solution and normal saline solution.
2. Calculate the maintenance IV fluid rate in ml/hour for a 70-kg patient.
3. List 7 categories of causes of volume depletion.
4. State two complications each of hypernatremia, hyponatremia, hyperkalemia, hypokalemia, hypercalcemia, hypocalcemia, hypermagnesemia, and hypomagnesemia.

Post-Op Oliguria

1. Define oliguria in ml/day urine output.
2. Define anuria in ml/day urine output.
3. List 6 questions to ask in the initial evaluation of a patient with low urine output.
4. State the equation for differentiating renal causes of low urine output from pre-renal and post-renal causes.
5. List 3 steps for the initial management of low urine output in the post-operative patient.
6. Recognize that flushing a urinary catheter increases the risk for urinary tract infection.

7. State the information necessary to provide to the senior resident regarding a patient with low urine output.
8. State that urine output should be checked within one hour after intervention is implemented.

Post-Op Fever

1. Define post-operative fever in Fahrenheit and centigrade.
2. List 6 questions to ask in the initial evaluation of the post-operative patient with fever.
3. List 5 steps in the initial management of the unstable febrile patient.
4. List 5 infectious and 5 non-infectious causes of post-operative fever.
5. List 3 groups of febrile patients who require empiric antibiotic treatment.
6. List 5 life-threatening causes of post-operative fever.
7. State the information necessary to provide to the senior resident regarding a patient with post-operative fever.

Mental Status Changes

1. List 8 questions to ask in the initial evaluation of a patient with mental status changes.
2. List 6 categories of causes of mental status changes.
3. Calculate the Glasgow Coma Scale score for a hypothetical patient without any aids.
4. State 2 initial intervention for each of the following causes of mental status changes: narcotic or benzodiazepine medications, herniation or mass lesion, primary psychiatric disease, and delirium.
5. State 4 interventions for mental status changes due to alcohol withdrawal.
6. State the information necessary to provide to the senior resident regarding a patient with mental status changes.

Nausea/Vomiting

1. List 8 questions to ask in the initial evaluation of the patient with nausea or vomiting.
2. List 8 categories of causes of nausea and vomiting.
3. State that the first step in managing the vomiting patient is to evaluate the airway and secure it if necessary.
4. State that aspiration secondary to vomiting can be life threatening.
5. List 4 steps to evaluate and manage the causes of nausea and vomiting.
6. State the information necessary to provide to the senior resident regarding a patient with nausea or vomiting.

Pain Management

1. List 4 narcotic and 4 non-narcotic drugs used for post-operative pain management.
2. List 8 questions to ask in the initial evaluation of a patient complaining of pain in the post-operative period.
3. State when to use narcotics, non-narcotics, or a combination of the two based on the severity of a patient's post-operative pain.
4. State which drug is used to treat narcotic overdose.
5. State the information necessary to provide to the senior resident regarding a patient with post-operative pain.

ICU Monitoring/Drips

1. State normal ranges for each of the following vital signs in patient who is not intubated: heart rate, systolic blood pressure, diastolic blood pressure, mean arterial blood pressure, central venous blood pressure, oxygen saturation, and breathing rate.
2. State whether example sets of monitoring data including heart rate, blood pressure, oxygen saturation, breathing rate, and central venous pressure are normal or abnormal for a patient who is not intubated.
3. State the mechanism of action of each of the following drugs: dopamine, dobutamine, epinephrine, norepinephrine, amiodarone, lidocaine, nitroprusside, and nitroglycerin.
4. State 2 the side effects of each of the following drugs: dopamine, dobutamine, epinephrine, norepinephrine, amiodarone, lidocaine, nitroprusside, and nitroglycerin.

CURRICULUM SCHEDULE

JULY 2012 – JUNE 2013
THURSDAY 7 - 10 AM

REQUIRED TEXTBOOKS

Primary Text:	SCORE (on line account)
Optional Text:	Sabiston Textbook of Surgery (Online)
	ACS Surgery (Online)
	The Physiologic Basis of Surgery, O'Leary (4th Edition)
ABSITE Text:	The ABSITE Review, Fiser (1st/2nd Edition)

Surgery Core Curriculum Learning Objectives

The Learning Objectives for each lecture are listed on the SCORE website. It is anticipated that the lecturer will not be able to cover all of the objectives. Each resident is responsible for the readings and understanding the objectives. The objectives that the lecturer will be expected to cover will be assigned by the Education/Score Committee one month prior to the lecture and will be posted on the shared Surgery Resident Folder.

General

Ethics in Surgery

1. Recognize the role of ethics in current surgical practice
2. State the ACS principles guiding end of life care.
3. State AMA's principles for medical ethics.
4. Discuss ethical issues related to the General Competencies of the ACGME

Introduction of Proficiency and CBL

1. To understand the changes that have occurred with the updated curriculum
2. To become familiar with what skills a resident must become proficient
3. To become familiar with the concept of CBL
4. To understand what is necessary to have a successful CBL session

JULY 2012

Date	Time	Grp	Session	Facilitator	Module	Location
5-Jul	7am		Intro to Curriculum	Dillon		Hosp Aud
	8am	R1	Suturing and Knot Tying	Juza/Wilson		Sim Ctr Rm A/B
	8am	R2/R3	ST: Lap G-tube	Santos		Sim Ctr: Debriefing Rm
	8am	R4/R5	ST: Liver rescection for colorectal liver masses	Kimchi		C4637
	9am	R1	Fundamentals Of Surgery	James	Fluids/Electrolytes; Postop Oliguria/Fever	Sim Ctr: Rm A/B
	9am	R2/R3	Skills: G-Tube/Broviac Repair	Santos		Sim Ctr: Debriefing Rm
	9am	R4/R5	FLS/Advanced Lap Skills	MIS Staff/Fellows		C4635
12-Jul	7am		Mandatory GME Lecture	Beth Herman		Hosp Aud
	8am	R1	Skills: Chest Tubes/Central Lines	Enomoto/Laufenberg		Sim Ctr: Rm 3/4; VR Rm
	8am	R2/R3	ST: Open and Laparoscopic Appendectomy	Ped Surg		C4637
	8am	R4/R5	ST: Femoral Hernia Repair	Soybel		Sim Ctr: Debriefing Rm
	9am	R1	Fundamentals of Surgery	Erdahl	Arrhythmias; chest pain; SOB; hypotension	LR B
	9am	R2/R3	Resident Meeting	Dillon		C4637

Date	Time	Grp	Session	Facilitator	Module	Location
19-Jul	7am	R1	Fundamentals of Surgery	Hansen	ICU Monitoring/ICU Drips	Hosp Aud
	7am	R2/R3	ST: Open Cholecystecomy with & without Cholangiography	Soybel		Sim Ctr: Debriefing Rm
	7am	R4/R5	ST: Damage control and Trauma Exp Lap	Indeck		C4637
	8am	R1-R5	Pre-op assessment of cardiac, pulmonary risk and co-existing infection	Thompson (Robt)	Preoperative Evaluation and Perioperative Care	Hosp Aud
	9am	R2-R5	SESAP	Berry		Hosp Aud
	9am	R1	Skills: Chest Tubes/Central Lines	Juza/Geletzke		Sim Ctr: Skills & VR Rms
26-Jul	7am		Professionalism	Dillon		Hosp Aud
	8am	R1	Fundamentals of Surgery	Matsushima	Pain management/Nutrition	Hosp Aud
	8am	R2/R3	Overview of Endoscopy	Yasin/Bhardwaj		Sim Ctr: VR Rm / C4635
	8am	R4/R5	ST: Lap Heller	Haluck		Sim Ctr: Debriefing Rm
	9am	R1	Resident Meeting	Dillon		C4637

AUGUST 2012

Date	Time	Grp	Session	Facilitator	Module	Location
2-Aug	7am		Core Competency: Sleep Deprivation	L Kass		Hosp Aud
	830am	R1	Skills: Suturing/Knot Tying	Enomoto/Laufenberg		Sim Ctr: Rms 3/4
	830am	R2/R3	Airway Management - Percutaneous Trach	Goldenberg		Sim Ctr: Skills Rm
	830am	R4/R5	ST: Carotid Endarterotomy	Atnip		C4637
9-Aug	7am		Portal Hypertension & General Surgery Challenges	Kadry	Abdomen - Liver	Hosp Aud
	8am	R1	Skills: Chest Tubes/Central Lines	Juza/Wilson		Sim Ctr: Rms 6/7; VR Rm
	8am	R2 - R5	SESAP	Morrow		Hosp Aud
	9am	R1	Fundamentals of Surgery	Pastor	Abdominal Pain/GI Bleeding	LR C
	9am	R2/R3	Resident Meeting	Dillon		C4637
	9am	R4/R5	ST: Liver Resection	Gusani		Sim Ctr: Debriefing Rm
16-Aug	7am		Jaundice, Gall Bladder Polyps/Cancer, Liver Abscesses	Kimchi	Abdomen - Biliary	Hosp Aud
	9am	R1	Fundamentals of Surgery	Hansen	Wound Management	Hosp Aud
	9am	R2/R3	ST: Laparoscopic Cholecystectomy with & without Cholangiography	Pauli		Sim Ctr: Debriefing Rm
	9am	R4/R5	ST: APR	Stewart		C4637

Date	Time	Grp	Session	Facilitator	Module	Location
23-Aug	7am		Principles and Practice of Patient Safety	Caputo		Hosp Aud
	8am	R1	Your Surgical Career	Haluck		Hosp Aud
	9am	R1	Resident Meeting	Dillon		C4637
	9am	R2/R3	Advanced Lap Skills/Endoscopy	Singhal/Tran, Yasin/Bhardwai		Sim Ctr: VR Rm / C4635
	9am	R4/R5	ST: Retroperitoneal Sarcoma Management	Gusani		C4832
30-Aug	7am		GE Reflux, Barrett's Esophagus; Dysphagia	Lyn Sue	Alimentary Tract – Esophagus	Hosp Aud
	8am	R1	Fundamentals of Surgery	James	Altered Mental Status; Postop N/V	Anteroom
	8am	R2-R5	CBL	Matsushima		Hosp Aud
	9am	R1	Practice Basic Skills	Lab Residents		Sim Ctr: Skills Rm; Rm ¾
	9am	R2/R3	ST: Segmental Liver Biopsy	Gusani		Hosp Aud
	9am	R4/R5	ST: Lap Inguinal/Ventral Hernia Repair	Lyn Sue		C4637

SEPTEMBER 2012

Date	Time	Grp	Session	Facilitator	Module	Location
6-Sep	7am		Journal Club			C3621
	830am	R1-R3	Electrical Energy Skills	Santos		Sim Ctr: Rm 6/7; VR Rm
	830am	R4/R5	ST: Open/Endovascular Repair AAA	A. Reed		C4637
13-Sep	7am		Anal Cancer	Colorectal	Anorectal	Hosp Aud
	8am		SESAP	James		Hosp Aud
	9am	R1	Chest Tubes/Central Lines	R4/R5		Sim Ctr: VR Rm/C4635
	9am	R2/R3	Meeting	Dillon		C4637
20-Sep	7am		VTE, Stasis and insufficiency	Atnip	Vascular - Venous Disease	Hosp Aud
	8am		CBL	Gunn		Hosp Aud
	9am	R1	Skills: Intro to MIS Skills	R4/R5		C4635
	9am	R2/R3	ST: Open and Percutaneous G-Tube	Ped Surg		C4637
27-Sep	7am		Trauma Grand Rounds			Hosp Aud
	8am	R1	Skills: Suturing/Knot Tying	Juza/Wilson		Sim Ctr: Rm A/B
	8am	R2/R3	Advanced Lap Skills/Endoscopy	Singhal/Tran, Yasin/Bhardwai		Sim Ctr: VR Rm / C4635
	8am	R4/R5	ST: Esophagectomy	Kaifi		C4637
	9am	R1	Meeting	Dillon		Sim Ctr: Rm A/B

OCTOBER 2012

Date	Time	Grp	Session	Facilitator	Module	Location
4-Oct	7am		Journal Club			LR B
	830am		Oncology and Tumor Biology	Surg Onc	Onc and Tumor Biology	LR B
11-Oct	7am		MIS equipment and troubleshooting	MIS	MIS principles	Hosp Aud
	8am	R1	Practice all skills for VOP	Lab Residents		Sim Ctr: Rms 3/4
	8am	R2/R3	Advanced Lap Skills/Endoscopy	Singhal/Tran, Yasin/Bhardwai		Sim Ctr: VR Rm / C4635
	8am	R4/R5	NSQIP			Sim Ctr: Debriefing Rm
	9am	R2/R3	Resident Meeting	Dillon		C4637
18-Oct	7am		Anesthesia-Choice, conscious/general/regional, post op pain		Anesthesia	Hosp Aud
	8am	R1	SESAP	Dunn		Hosp Aud
	9am	R1	Practice Chest Tubes	Geletzke/Juza		Sim Ctr: Rm 3/4
	9am	R2/R3	ST: Open Small Bowel Resection & Open Adhesiolysis			C4637
	9am	R4/R5	ST: Lap/Open Adrenalectomy	Saunders		Sim Ctr: Debriefing Rm
25-Oct	7am		TRAUMA GRAND ROUNDS			LR B
	8am		Fundamentals of Quality Improvement: Opportunities for Resident Projects	Caputo		LR B
	9am	R1	Resident Meeting	Dillon		C3621
	9am	R2/R3	ST: Ileostomy and Ileostomy Closure	Colorectal		LR B
	9am	R4/R5	ST: Total Colectomy	Colorectal		C4637

NOVEMBER 2012

Date	Time	Grp	Session	Facilitator	Module	Location
1-Nov	7am		Journal Club			LR C
	830am	R1	VOP	Faculty		Sim Ctr: Rm 3/4; VR Rm; Skills Rm
	830am	R2/R3	ST: Laparoscopic Setup	Haluck		LR C
	830am	R4/R5	ST: Lap/Open Nissen	Santos		Sim Ctr: Debriefing Rm
8-Nov	7am		Acute limb ischemia; Arterial emboli; Thrombosis	Atnip	Vascular – Arterial Disease	Hosp Aud
	8am		CBL	Vascular Fellow		Hosp Aud
	9am	R1	VOP	R4/R5		Sim Ctr: Rm 6/7; VR Rm; Skills Rm
	9am	R2/R3	Resident Meeting	Dillon		C4637
15-Nov	7am		Emergent Management of Ulcerative Colitis, Crohns (small intestine and Colon), Indeterminate Colitis	Colorectal	Alimentary Tract – Large Intestine	Hosp Aud
	8am		CBL	CRS Fellow		Hosp Aud
	9am	R1	Resident Meeting	Dillon		C4637
	9am	R2/R3	ST: Lumpectomy, Total/Skin Sparing Mastectomy, SLN Bx	Kass		Hosp Aud
	9am	R4/R5	ST: Pulmonary Lobectomy	M. Reed		Sim Ctr: Debriefing Rm
22-Nov			THANKSGIVING			
29-Nov	7am		Pharmacology			Hosp Aud
	8am		Ethics - Jehovah's Witness	Samuel Mauray Phillip Mitchell		Hosp Aud
	9am	R1	VOP	Faculty		Sim Ctr: Rm 6/7; Skills Rm; VR Rm
	9am	R2 - R4	Skills: Vascular Anastomosis	Vascular		C4635
	9am	R5	Mock Oral Boards			

DECEMBER 2012

Date	Time	Grp	Session	Facilitator	Module	Location
6-Dec	7am		Journal Club / Core Competency			LR B
	830am	R1	VOP	Faculty		Sim Ctr: Rm 6/7; Skills Rm; VR Rm
	830am	R2/R3	ST: Open Partial Colectomy & Colostomy	Colorectal		C4637
	830am	R4/R5	ST: Lap Gastric Bypass	Rogers		Sim Ctr: Debriefing Rm
13-Dec	7am		Transplant Immunology and histocompatibility; Components of the Immune System	Uemura	Immunology	Hosp Aud
	8am		SESAP	Chesnut		Hosp Aud
	9am	R1	ST			Sim Ctr: Rm 6/7
	9am	R2/R3	Resident Meeting	Dillon		C4637
	9am	R4/R5	ST: Gastrectomy	Surg Onc		
20-Dec	7am		Trauma Grand Rounds	Ped Surg		Hosp Aud
	8am		Fluids/Electrolytes - Acid/Base	Harpster/Miller/SICU	Fluids, Electrolytes & Acid-Base Balance	Hosp Aud
	9am	R1	Resident Meeting	Dillon		C4637
	9am	R2-R5	NSQIP			
27-Dec			HOLIDAY WEEK			

JANUARY 2013

Date	Time	Grp	Session	Facilitator	Module	Location
3-Jan	7am		Hypovolemic/Cardiogenic/Neurogenic Shock		Surgery Critical Care	
	8am		SESAP	Tomasko		
	9am	R1	Basic Lap Skills	R4		C4635
	9am	R2/R3	ST: Venous Insufficiency & Operation for Varicose Veins	Vascular		C4637
	9am	R5	Mock Oral			Sim Ctr: Debriefing Rm; Rm 3, 4
10-Jan	7am		Research Design; How data is expressed; Tests of Significance; Evaluating the Quality of a Study Levels of Evidence; Surveys	Hollenbeak	Biostatistics and Evaluation of Evidence	
	8:30am		ABSITE Sample Questions	Wilson		
	9am	R1	Skills/VOP make-up	Faculty		Sim Ctr: Rm 3/4, Skills/VR Rm
	9am	R2/R3	Resident Meeting	Dillon		C4637
	9am	R4/R5	ST: Lap Splenectomy	MIS		Sim Ctr: Rms A/B
17-Jan	7am		Renal Failure, Derangements of Electrolytes and acid-base	Miller (Renal)	Surgical Critical care	
	8am	R1 - R3	ACLS review			
	8am	R4/R5	ST: Parathyroid	Saunders		Sim Ctr: Debriefing Rm
	9am	R1	ACLS Skills			Sim Ctr: Rm 3/4
	9am	R2/R3	Resident Meeting	Dillon		C4637
	9am	R4/R5	ST: IPAA	Colorectal		Sim Ctr: Debriefing Rm

Date	Time	Grp	Session	Facilitator	Module	Location
24-Jan	7am		Trauma Grand Rounds			
	8am		Thyroid nodule; Papillary/Follicular Carcinoma; Postop Hypothyroidism; Primary Hyperparathyroidism	Saunders	Endocrine	
	9am	R1	Resident Meeting	Dillon		C4637
	9am	R2 - R5	SESAP	Avella		
31-Jan	7am	R1 - R4	Ethics	Chesnut		
	7am	R5	Mock Oral Board			Sim Ctr: Debriefing Rm; Rm 3, 4
	8am		Pulmonary Contusion/Laceration; Pulmonary Effusion; Empyema	CT Surg	Trauma / Thoracic Surgery	
	9am		CBL	CT Fellow		

FEBRUARY 2013

Date	Time	Grp	Session	Facilitator	Module	Location
7-Feb	7am		Journal Club / Core Competency			
	830am	R1	Skills: Airway Management	Goldenberg		Skills Rm, Rm 3/4
	830am	R2/R3	Skills: Advanced Suturing Techniques	Pauli		Sim Ctr: Rm A/B
	830am	R4/R5	Advanced Lap skills	Singhal/Tran		C4635
14-Feb	7am		Career Day	All Section Chiefs		
	8am		Management of Acute Pain	Anesthesia	Nervous system	
	9am	R1	ST:			
	9am	R2/R3	Resident Meeting	Dillon		C4637
	9am		ST:			
21-Feb	7am		Vascular injuries to the Thorax/Abdomen, Retroperitoneal Hematoma	Vascular	Trauma	
	8am		Radiology in a nutshell - Utilization of Resources – Radiation Safety	Sarwani		
	9am	R1-R4	Role of Research in Surgery	Soybel		
	9am	R5	Mock Oral Boards	Faculty		Sim Ctr: Debriefing Rm, Rm 3/4
28-Feb	7am		Trauma Grand Rounds			
	8am		CBL – Mass Casualty / Triage	Dash		
	9am	R1	Resident Meeting	Dillon		C4637
	9am	R2/R3	ST: Thyroidectomy			
	9am	R4/R5	ST: Bile Duct Injuries	Gusani		Sim Ctr: Debriefing Room

MARCH 2013

Date	Time	Grp	Session	Facilitator	Module	Location
7-Mar	7am		Journal Club / Core Competency			
	830am	R1	Skills: Intro to Endoscopy	Pauli		Sim Ctr: Rm A/B
	830am	R2/R3	Skills: Tissue handling	Peds Surg		Sim Ctr: Rms 3/4
	830am	R4/R5	ST: Fem Pop Bypass	Han		C4637
14-Mar	7am		Injuries to the stomach, duodenum, and pancreas	Trauma	Trauma	
	8am		CBL	James		
	9am	R1	Intubation	Lab Residents		Sim Ctr: Skills /VR Rm
	9am	R2/R3	Resident Meeting	Dillon		C4637
	9am	R4/R5	NSQIP			Sim Ctr: Debriefing Rm
21-Mar	7am		Colonic Polyps and Colonic Cancer	Colorectal	Alimentary Tract - Large intestine	
	8am		Diagnosing and Triaging Ortho Emergencies	Bent		
	9am	R1	ST: Tracheostomy	Trauma		Sim Ctr: Rm 3/4
	9am	R2-R5	Residents Teaching Residents	Erdahl		
28-Mar	7am		Rib/Sternal Fractures; Flail Chest; Pneumothorax; Hemothorax	CT	Trauma	
	8am		OB issues in General Surgery	J Pauli		
	9am	R1	Resident Meeting	Dillon		C4637
	9am	R2/R3	ST: Arteriovenous Graft/Fistula	Vascular		
	9am	R4/R5	ST: Lap Distal Pancreatectomy	Surg Onc		Sim Ctr: Debriefing Rm

APRIL 2013

Date	Time	Grp	Session	Facilitator	Module	Location
4-Apr	7am	R1, R2, R4	Pelvic Binding and Hare Traction/ Emergent Splinting	Bent/Reid		
	7am	R3	ST: Enteral Access (G-, J- Tubes)	Soybel		
	7am	R5	Mock Oral Boards			
	830am		Journal Club			
11-Apr	7am		Gastric Carcinoma, Gastric Polyps; Gastric Lymphoma, Gastric Carcinoid Tumor	Surg Onc	Alimentary Tract - Stomach	
	8am		CBL	Bhayani		
	9am	R1	ST: Incision/Drainage/Debridement of Soft Tissue Infection			
	9am	R2/R3	Resident Meeting	Dillon		C4637
	9am	R4/R5	ST: Diaphragmatic Hernia	Cilley		
18-Apr	7am		Addisonian Crisis;	Saunders	Endocrine	
	8am		CBL	Gopal		
	9am	R1	ST: Drainage of Anorectal Abscess, Fistulotomy, Seton Placement	Colorectal		
	9am	R2/R3	Lap Skills/Lower Endoscopy	Singhal/Tran, Yasin/Bhardwai		Sim Ctr: VR Rm / C4635
	9am	R4/R5	ST: Whipple	Gusani		Sim Ctr: Debriefing Rm

Date	Time	Grp	Session	Facilitator	Module	Location
25-Apr	7am		Trauma Grand Rounds			
	8am	R1	ST: Open & Laparoscopic Appendectomy	Santos		
	8am	R2/R3	ST: Diagnostic/Laparoscopic Exploratory Laparotomy	Trauma		
	8am	R4/R5	ST: Ascending Aortic Aneurysm Repair	Vascular		
	9am	R1	Resident Meeting	Dillon		C4637
	9am	R2/R3	Lap Skills/ Endoscopy	Singhal/Tran, Yasin/Bhardwai		Sim Ctr: VR Rm / C4635
	9am	R4	How to be a Chief Resident	R5		

MAY 2013

Date	Time	Grp	Session	Facilitator	Module	Location
2-May	7am		Journal Club / Core Competency			
	830am	R1	ST: Percutaneous Vascular Access/CVC/PAC	Vascular		
	830am	R2/R3	ST: Open and Laparoscopic Repair of Ventral Hernia	Pauli		
	830am	R4/R5	ST: Retroperitoneal Dissection	Cilley		
9-May	7am		Transfusion and disorders of coagulation			
	8am		SESAP	Gibney		
	9am	R1	Skills: Stapled GI Anastomosis	CRS		Sim Ctr: Rm 3/4
	9am	R2/R3	Resident Meeting	Dillon		C4637
	9am	R4/R5	Skills: Laparoscopy in small places	Santos/Cilley		C4635
16-May	7am		Acute Mesenteric Ischemia (arterial, venous, non-occlusive)	Colorectal	Alimentary Tract - Small intestine	
	8am		Nutrition and metabolism			
	9am	R1	Central Lines/Chest Tubes refresh	Lab Residents		Sim Ctr: VR Room
	9am	R2/R3	Skills			C4635
	9am	R4/R5	ST: Breast	Kass		C4637

Date	Time	Grp	Session	Facilitator	Module	Location
23-May	7am		Trauma Grand Rounds			
	8am		Nevi; Melanoma	Neves	Skin and Soft Tissue	
	9am	R1	Resident Meeting	Dillon		C4637
	9am	R2/R3	ST: Laparoscopic Liver Biopsy			
	9am	R4/R5	ST: Perianal Procedures	McKenna		
30-May	7am		Diagnostic approach to Infection; Surgical Site Infections and Prophylaxis	McKenna	Infection and antimicrobial therapy	
	8am		Ethics	Chesnut		
	9am	R1	ST: Open Gastrostomy	Ped Surg		
	9am	R2/R3	Advanced Lap Skills/Lower Endoscopy	Singhal/Tran, Yasin/Bhardwai		Sim Ctr: VR Rm / C4635
	9am	R4/R5	Mock Oral Boards			

JUNE 2013

Date	Time	Grp	Session	Facilitator	Module	Location
6-Jun	7am		Journal Club / Core Competency			
	830am	R1	Intro to Consult Call	Lab, R5		
	830am	R2/R3	Trauma Chief Practicum	R4		
13-Jun	7am		Injury to the small intestine, colon and rectum	Trauma	Trauma	
	8am		CBL	Boltz		
	9am	R1	ST: Hemorrhoidectomy and banding of internal hemorrhoids			
	9am	R2/R3	Resident Meeting	Dillon		C4637
	9am	R4/R5	ST: Proctosigmoid Resection	Colorectal		
20-Jun	7am		NSQIP			
	8am	R1	Skills: Repair broviac, G-tubes replacement/dilation and track dilation	Santos		
	8am	R2/R3	ST: Organ Procurement/Lifting Related Donor Liver Transplant	Uemura		
	8am	R4				
	9am	R1	Resident Meeting	Dillon		
	9am	R2/R3				
27-Jun	7am		Trauma Grand Rounds	Neurosurgery		
	8am		Intro of 2013/2014 Curriculum	Dillon		

Ultrasound for Surgeons Program

The Ultrasound for Surgeons Program (CD-ROM purchase and full day courses) will be sponsored by the Department of General Surgery for surgical residents and selected staff members throughout the year.

Residents will be required to complete the courses as assigned during the academic year.

Course Component Overview

Ultrasound for Surgeons: The Basic Course

General Objectives: The objective of the course is to provide the practicing surgeon and surgical resident with a basic core of education and training in ultrasound imaging as a foundation for specific clinical applications.

Upon successfully completing this CD-ROM a surgeon should be able to:

- Describe the American College of Surgeons Educational program in Ultrasound
- Describe Ultrasound Physics in reference to clinical ultrasound
- Describe the basic components of an ultrasound machine
- Describe the essential aspects of proper ultrasound scanning techniques
- Describe the safety issues associated with clinical ultrasound
- Provide an overview of the use of ultrasound in the following clinical areas: breast, neck, vascular, acute evaluation, intra operative, laparoscopic, endoluminal, and head and neck
- Discuss strategies to introduce ultrasound into surgical practice.

The Basic Course Curriculum:

- Introduction to ACS Educational Program
- Ultrasound physics
- Instrumentation and scanning technique
- Clinical applications

Ultrasound for Surgeons: Acute Module (Dr. Galvan and Dr. Han)

General Objectives: To provide the practicing surgeon and surgical resident with advanced education and training in ultrasound, as it is used in the diagnosis and treatment of acutely ill surgical patients.

The Acute Module Curriculum:

- Principles of imaging
- Ultrasound as used in trauma
- Ultrasound as used in critical-care and emergency-department settings
- Interventional ultrasound for the surgeon

Ultrasound for Surgeons: Breast Module (Dr. Kass and Dr. Smith)

General Objective: The objective of this course is to introduce the practicing general surgeon to a focused module in diagnostic and interventional breast ultrasound. The program will consist of lectures and hands-on skill stations using a variety of ultrasound equipment. Live models and phantom breast moulages will be used to develop skills in breast ultrasound imaging and ultrasound-guided breast biopsy.

The Breast Module Curriculum:

- Physics and principles of breast ultrasound
- Scanning technique and normal breast ultrasound anatomy
- Breast ultrasound interpretation: benign vs. malignant
- Interventional breast ultrasound

Ultrasound for Surgeons: Vascular Module (Dr. Han)

General Objective: The objective of this course is to provide the practicing surgeon and surgeon-in-training with core education and training in the indications, techniques, advantages, and limitations of ultrasound examinations in the diagnosis and treatment of patients with vascular disease.

Emphasis is given to those procedures that require surgeon involvement in image and Doppler signal acquisition. Topics to be covered include vascular ultrasound physics and the use of ultrasound in the diagnosis and treatment of carotid artery occlusive disease, abdominal aortic aneurysms, and venous disease. Special emphasis will be given to ultrasound-guided venous interventions as well as treatment of femoral pseudoaneurysms. Selected topics in vascular laboratory management will also be discussed, including billing and coding, data management and reporting, and credentialing and accreditation. The hands-on workshop skills session will provide the surgeon with an opportunity to apply new knowledge in order to obtain optimal ultrasound images to improve therapy and direct treatment.

The Vascular Module Curriculum:

- Vascular ultrasound physics: Doppler, spectral analysis, and color-flow
- Ultrasound safety
- Venous evaluation: vein mapping, perforator identification, and venous access
- Carotid duplex: criteria for surgery without arteriography
- Intra-operative lower extremity arterial evaluation
- Duplex imaging following interventions: angioplasty and bypass
- Abdominal aortic aneurysm screening: use in the emergent setting
- Ultrasound-guided pseudo-aneurysm intervention
- Coding and billing

Ultrasound for Surgeons: Head and Neck Module (Dr. Goldenberg and Dr. Saunders

General Objective: To provide the practicing surgeon and surgical resident with knowledge and practical skills in the application of diagnostic and interventional head/neck ultrasound.

In particular, this course will introduce the practicing surgeon to office-based examination of the thyroid and parathyroid glands and related pathology. The distinction of normal from malignant lymphadenopathy will be emphasized with a demonstration of the comprehensive examination of lymph node basins in cervical zones I–VI. The process of ultrasound-guided fine needle aspiration (FNA) of thyroid nodules and enlarged lymph nodes will be demonstrated in didactic lecture format. In addition, the hands-on skill sessions will allow the surgeon to learn varied techniques of FNA in phantom models. Patient volunteers with thyroid and parathyroid pathology and normal glands will be used for the skill sessions. A DVD demonstrating real-time examination of the salivary glands, cervical lymph nodes, and normal and abnormal thyroid and parathyroid lesions will be given to the course participant for his or her future reference. Credentialing and coding issues will also be discussed.

Head and Neck Module Curriculum:

- Physics and principles of ultrasound
- Scanning techniques and normal head/neck ultrasound anatomy
- Head/neck ultrasound interpretation
- Interventional head/neck ultrasound

Fundamentals of Laparoscopic Surgery (FLS) Program

The FLS Program (CD-ROM purchase and testing ticket) will be sponsored by the Department of General Surgery through the FLS Covidien Educational Fund for Chief Surgery residents and fellows (Colorectal, MIS, Bariatric and Hepatobiliary).

Clinical 4th year residents will be required to complete the course and pass the FLS test by May of their 4th year.

Tentative Schedule

Didactic Component: Self Study
Skills Component: Introduction in Thursday Skills Sessions followed by self study with observation of practice sessions as requested.
Practice Skills Test: Sim Center VR Room and C4635 are available 24/7 for practicing
FLS Testing: You must register on line for your FLS Testing. Penn State Hershey is an official test site.

Purpose

To provide residents and fellows an opportunity to learn the fundamentals of laparoscopic surgery in a consistent, scientifically accepted format to test cognitive, surgical decision-making, and technical skills, all with the goal of improving the quality of patient care.

Program Overview

FLS is a comprehensive, CD-ROM module that includes a hands-on skills training component and didactic component designed to teach the physiology, fundamental knowledge, and technical skills required in laparoscopic surgery.

FLS was designed for surgical residents, fellows and practicing surgeons to learn and practice laparoscopic skills to have the opportunity to definitely measure and document those skills. The FLS Test measures cognitive knowledge, case/problem management skills and manual dexterity. The FLS program content has been endorsed by the American College of Surgeons (ACS) and is a joint educational offering of SAGES and ACS. FLS is also CME accredited.

This is a valuable foundation or supplement to any current laparoscopic curriculum. FLS is also an appropriate learning tool for disciplines such as gynecology and urology, as FLS is not procedure-specific.

FLS Objectives

- To improve the quality of care received by patients undergoing laparoscopic surgery
- To set minimum standards for basic cognitive and technical skills used in performing laparoscopic procedures
- To provide surgeons practicing laparoscopy with standardized didactic information on the fundamentals of laparoscopic surgery and a tool to assist in development of judgment and manual skills
- To create an objective quantifiable measure to assess knowledge, judgment and manual skills in basic laparoscopic surgery

- To make available to hospitals and institutions a validated tool to measure the knowledge and skills fundamental to the performance of laparoscopic surgery

Program Description

FLS establishes a standard set of didactic information and manual skills serving as a basic curriculum to guide surgical residents, fellows and practicing surgeons in the performance of basic laparoscopic surgery. By mastering the curriculum and gathering of skills in this inanimate modality, it is expected that surgical residents and surgeons will initiate and carry out their performance of laparoscopy more effectively, with greater skills, greater safety, and with lower complication rates than previously. The specific aim of FLS is that the knowledge and skills gained by those who master the FLS curriculum will improve the quality and safety of surgical care delivered to their patients.

Components

FLS consists of:

1) web-based study guide;
2) hands-on manual skills practice and training via the FLS Laparoscopic Trainer Box;
3) an assessment tool that measure your cognitive and technical skills.

The Assessment Component is a two-part, proctored exam that covers cognitive knowledge and manual skills.

The cognitive component is a timed, 75-question multiple-choice exam administered via computer. It is designed to test the understanding and application of the basic fundamentals of laparoscopy with emphasis on clinical judgment and intra-operative decision-making.

The manual skills component evaluates skills based on speed and accuracy of the surgeon's maneuvers using the FLS Laparoscopic Trainer Box. The test consists of five non-procedure specific simulation exercises incorporating most of the psychomotor skills necessary for basic laparoscopic surgery.

General Surgery Journal Club 2012 - 2013

OVERVIEW

General Surgery Journal Club will meet monthly for 9-11 months of the year to discuss a current topic relevant to the practice of surgery with attending moderators to guide the discussion.

Journal Club is a mandatory part of our educational program. Attendance will be recorded as part of a resident's formal evaluation. Excused absences (at meeting, interviewing, vacation, etc.) will not count against a resident's attendance record.

Attendance is required for residents regardless of the service to which they are assigned. Designated preliminary and non-designated preliminary residents are still expected to attend General Surgery Journal Club even if not on a general surgery service (unless criteria are met for an excused absence).

OBJECTIVES

1. Residents will demonstrate understanding of information concerning the care of surgical patients related to the topic of discussion. This will consist of evidence-based medicine from recently published articles supporting or refuting current surgical practice.

2. Residents will demonstrate the ability to analyze journal articles critically. This requires understanding that not every published paper carries the same weight, and it is extremely important to be able to distinguish between those papers that change surgical practice and those that fail to advance the field.

3. Residents will engage in collaborative learning with their colleagues facilitated by faculty experts.

ARTICLE SELECTION

Two to three articles will be selected for each session by the lab residents and the Chair. They should include articles published in the **3 months** prior to the meeting. The articles selected **do not** need to address the same topic or surgical specialty area. Articles should focus on current topics related to the essential content areas of surgery as defined by the ACGME. Articles will be selected two to three weeks in advance of the scheduled session. Division chiefs will be notified of the articles selected so that faculty members from each involved specialty have adequate time to prepare for facilitating the discussion at Journal Club.

The journals considered might include (but are not limited to) the following: The American Journal of Surgery, Annals of Surgery, The Journal of the American College of Surgeons, The New England Journal of Medicine, etc., as well as main journals in subspecialty fields.

RESIDENT ASSIGNMENTS

The Education Coordinator will provide everyone with the journal articles via e-mail. Those residents being called upon to present the articles will be notified in the same email. All of this information will be distributed no less than two weeks before the actual Journal Club date leaving sufficient time for reading and preparation.

FORMAT

The residents will be split into three predetermined groups which shall remain the same for the duration of the academic year. One resident from each group shall be assigned to present each article, totaling six residents presenting. The assigned resident shall present to the small group, and discussion will ensue. After the groups have had sufficient time to discuss the article amongst themselves, there will be a brief large group discussion of the article in order to facilitate the widespread dissemination of information. The process will be repeated for the second article. There shall be one faculty moderator joining each of the three groups. It is not necessary for the faculty member to be a content expert.

Surgery Department Resident Quarterly Performance Evaluation Form
2012 - 2013

Resident: **Year:**

	Online Requirements		**Attendance**			
	Q SCORE Compliance	GME Lecture Series	Wednesday M & M	Thursday Education	Thursday Skills	Grand Rounds
Quarter	«Q1_SCORE»	«Q1_GME» %	«Q1_MM» %	«Q1_Thur_Educ» %	«Q1_Skills» %	«Q1_Surg_Grnd_Rnds» %

DUTY HOURS (# of reminders received re No hours logged = «Duty_Hr_Reminders»)								
Rotation	Check Period	Hrs/Wk	Off/Wk	Total Days Off	Days Vac	80 Hr Rule	Days Off Rule	8 hr Rule

New Innovations Evaluations **Overall Clinical Competency:**			
Core Competency	**Average Score**	Core Competency	**Average Score**
Patient Care		Professionalism	
Medical Knowledge		System Based Practice	
PBL/Environment		Interpersonal/Communication Skills	

ABSITE SCORES					
R1	R2	LAB	R3	R4	R5

Additional Comments:
Strengths:
Weaknesses:

I certify that I have reviewed this evaluation form with the Program Director.

_____ _____ _____
Program Director Resident Date

Note: The percentage rate for attendance has been adjusted for excused absences.

Per the Surgery Resident Curriculum:

- An attendance record of 75% or better is required at all educational conferences
- You are required to do 100% of the Core Competencies

RESIDENT ORAL CASE PRESENTATION EVALUATION FORM

Resident _____ Date: _____

Title of Talk:_____

I. CASE CHARACTERISTICS	Unsatisfactory				Satisfactory				Superior	
The case chosen represented a surgical disease/surgical problem of interest	1	2	3	4	5	6	7	8	9	10
The objectives of the presentation were clear	1	2	3	4	5	6	7	8	9	10
H&P presentation was succinct	1	2	3	4	5	6	7	8	9	10
	**********									
II. DELIVERY										
Clear and properly paced	1	2	3	4	5	6	7	8	9	10
Terminology appropriate and precise	1	2	3	4	5	6	7	8	9	10
Minimum of filler words (e.g. “uh, OK, you know”)	1	2	3	4	5	6	7	8	9	10
Uses hands and arms appropriately	1	2	3	4	5	6	7	8	9	10
Professional in manner and dress	1	2	3	4	5	6	7	8	9	10
Maintained eye contact with audience	1	2	3	4	5	6	7	8	9	10
Well organized and logically sequenced	1	2	3	4	5	6	7	8	9	10
	**********									
III. MEDICAL KNOWLEDGE / LEARNING POINTS										
Displayed evidence of adequate research	1	2	3	4	5	6	7	8	9	10
Responded knowledgeably to questions	1	2	3	4	5	6	7	8	9	10
Learning points were thought-provoking	1	2	3	4	5	6	7	8	9	10
Overall knowledge regarding topic	1	2	3	4	5	6	7	8	9	10

SPECIFIC SUGGESTIONS FOR THE PRESENTER:	Faculty Name: _____.

Adapted from Blane C.E., Calhoun J.G. *Objectively evaluating student case presentations.* **Invest. Radiol**. 1985;20:121-123 and http://medinfo.ufl.edu/year2/ebm/evaluation.shtml

OPERATIVE TEACHING ASSESSMENT

Attending: _

Procedure: _____

CPT Code: _____

Pre-operative	☐ Poor	☐ Appropriate	☐ Excellent

Did the attending review:

- patient evaluation ☐ Yes ☐ No
- rationale for procedure ☐ Yes ☐ No

Intra-operative	☐ Poor	☐ Appropriate	☐ Excellent

Did the attending discuss:

- Conduct of the surgical procedure ☐ Yes ☐ No
- Alternative surgical techniques ☐ Yes ☐ No
- Anatomy ☐ Yes ☐ No
- Management of complications ☐ Yes ☐ No

Post-operative	☐ Poor	☐ Appropriate	☐ Excellent

Did the attending review:

- Post-operative management ☐ Yes ☐ No
- Resident's surgical skills ☐ Yes ☐ No

SURGICAL SKILLS ASSESSMENT

Resident Name: _____ **Date:** _____
Training Level: PGY1 PGY2 PGY3 PGY4 PGY5
Service: ____
Procedure: _
CPT Code: __

Respect for Tissue				
1	**2**	**3**	**4**	**5**
Frequent unnecessary force on tissues or caused damage by inappropriate use of instruments		Careful handling of tissue but occasionally caused inadvertent damage		Consistently handled tissue appropriately with minimal damage to tissues
Time and Motion				
1	**2**	**3**	**4**	**5**
Many unnecessary moves		Efficient time/motion but some unnecessary moves		Clear economy of movement. Maximum efficiency.
Instrument Handling				
1	**2**	**3**	**4**	**5**
Tentative/awkward moves or inappropriate use		Competent use of instruments, occasionally awkward		Fluid moves with instruments. No awkwardness.
Flow of Operation / Intraoperative Decision-Making Skills				
1	**2**	**3**	**4**	**5**
Frequently stopped, seemed unsure of next move		Some forward planning, reasonable progression		Obviously planned course, effortless flow
Knowledge of Specific Procedure				
1	**2**	**3**	**4**	**5**
Deficient knowledge. Required specific instruction at most steps		Knew all important steps of operation		Demonstrated familiarity with all steps of operation
Communication Skills				
1	**2**	**3**	**4**	**5**
Frequent problems working with team or fails to communicate		Appropriate communication with team most of the time		Co-ordinates surgical team in a superior manner
Knowledge of Anatomy				
1	**2**	**3**	**4**	**5**
Little or no knowledge		Basic understanding		Thorough understanding
Depth Perception (Laparoscopic Procedures Only)				
1	**2**	**3**	**4**	**5**
Constantly overshoots, swings wide, slow correction		Some overshooting but quick to correct		Accurately directs instruments in correct plane
Bimanual Dexterity (Laparoscopic Procedures Only)				
1	**2**	**3**	**4**	**5**
Uses only one hand, poor coordination between hands		Uses both hands but does not optimize their interaction		Expertly uses both hands to provide optimal exposure

Examples of good skills: _____
Areas to work on: _____

Corrective action: Discussion Present at M&M Skills Lab Video

_____ _____
Faculty signature Resident signature

Verification of Proficiency Module for Central Venous Access
Penn State Surgical Skills Laboratory*

OBJECTIVES: By the end of this module the resident will meet proficiency standards for the performance of:

- Internal Jugular Venous Catheterization

GUIDELINES FOR PRACTICE

- View the videotape of the expert performance of a Internal Jugular Venous Catheterization
- Prior to beginning practice, request videotaping of your performance of a Internal Jugular Venous Catheterization
- Use the performance check list as a guide
- Practice with focusing on efficiency and economy of motion by observing the time it takes you to complete the procedure
- Request to be videotaped for your Central Venous Access Verification for Proficiency performance.

INSTRUCTIONS FOR VERIFICATION FOR PROFICIENCY TESTING

When you believe your practice sessions have resulted in proficiency in this skill area, you may request from the skills lab personnel to be videotaped for your verification of proficiency performance. Once this videotape has been completed, it will be submitted to a faculty member for evaluation. Their decision will either verify your proficiency in this skill or recommend further practice.

* Adapted from Southern Illinois University Dept of Surgery, General Surgery Residency Program OSATS

Central Venous Catheterization Verification of Proficiency Evaluation*

Resident: _____ **Date:** _____

Step	**Satisfactory**		Comments
Selects appropriate site for venipuncture	Y	N	
Simulates injecting local anesthesia into skin at appropriate site	Y	N	
Needle enters at 35 to 45 degree angle from skin and directed laterally	Y	N	
Venipuncture successful within three attempts	Y	N	
Confirms vessel entry by aspiration of blood	Y	N	
Transition to second model			
Removes syringe while occluding the hub of the needle	Y	N	
Inserts guide wire into needle, advancing without resistance	Y	N	
Removes introducer needle	Y	N	
Makes a small skin incision with #11 blade	Y	N	
Passes dilator over wire through skin and then removes dilator	Y	N	
Passes catheter over wire into "vessel" and removes wire	Y	N	
Simulates aspirating blood through catheter	Y	N	
Secures catheter with suture and applies dressing	Y	N	

Economy of Time and Motion	1	2	3	4	5
	Many unnecessary / disorganized movements		Organized time / motion, some unnecessary movement		Maximum economy of movement and efficiency

Final Rating	**Other Summative Comments**
☐**Demonstrates competence** ☐**Requires further practice**	**Evaluator:**

* Adapted from Southern Illinois University Dept of Surgery, General Surgery Residency Program OSATS

One Handed Knot **Resident:** _____ **Date:** _____

Tension maintained on suture throughout performance	Y	N
Smooth transition between knots	Y	N
Hands crossed at appropriate time to create square knot	Y	N

Total time for performance _____seconds

	1	2	3	4	5
Economy of Time and Motion	Many unnecessary / disorganized movements		Organized time / motion, some unnecessary movement		Maximum economy of movement and efficiency

Final Rating

❏ Demonstrates competence

❏ Requires further practice

Other Summative Comments:

Evaluator _____

Two Handed Knot **Resident:** _____ **Date:** _____

Tension maintained on suture throughout performance	Y	N
Smooth transition between knots	Y	N
Hands crossed at appropriate time to create square knot	Y	N

Total time for performance _____seconds

Economy of Time and Motion	**1**	**2**	**3**	**4**	**5**
	Many unnecessary / disorganized movements		Organized time / motion, some unnecessary movement		Maximum economy of movement and efficiency

Final Rating

❏ Demonstrates competence

❏ Requires further practice

Other Summative Comments:

Evaluator _____

Instrument Knot Tying

Resident: _____ **Date:** _____

Suture tail at appropriate length at beginning of skill	Y	N
Tension maintained on suture throughout performance	Y	N
Smooth transition between knots	Y	N
Fluid movement with instrument		
Hands crossed at appropriate time to create square knot	Y	N

Total time for performance _____ seconds

	1	2	3	4	5
Economy of Time and Motion	Many unnecessary / disorganized movements		Organized time / motion, some unnecessary movement		Maximum economy of movement and efficiency

Final Rating

❏ Demonstrates competence

❏ Requires further practice

Other Summative Comments:

Evaluator _____

Simple Interrupted Skin Closure **Resident: _____** **Date: _____**

Skin Suturing Steps			**Comments**
Passes needle perpendicular to skin on both sides of skin	Y	N	
Avoids multiple forcep grasps of skin	Y	N	
Instrument ties with square knots	Y	N	
Approximates skin with appropriate tension	Y	N	
Places sutures 0.5 – 1.0 cm. apart	Y	N	
Eversion of the skin edges	Y	N	

Economy of Time and Motion	1	2	3	4	5
	Many unnecessary / disorganized movements		Organized time / motion, some unnecessary movement		Maximum economy of movement and efficiency

Final Rating	**Other Summative Comments:**
❑ Demonstrates competence ❑ Requires further practice	Evaluator _____

Start Time _____

End time_____

Camera _____

CD # _____

Subcuticular Skin Closure

Resident: _____ **Date:** _____

Skin Suturing Steps			
Runs the suture, placing appropriate bites into dermal layer	Y	N	
Enters the dermal layer directly across from exit site	Y	N	
Avoids penetration of the epidermis	Y	N	
Avoids multiple forcep grasps of skin	Y	N	
Instrument ties with square knots	Y	N	
Approximates skin with appropriate tension	Y	N	

	1	2	3	4	5
Economy of Time and Motion	Many unnecessary / disorganized movements		Organized time / motion, some unnecessary movement		Maximum economy of movement and efficiency

Final Rating	**Other Summative Comments:**
❏ Demonstrates competence ❏ Requires further practice	Evaluator _____

Start Time _____ Camera _____

End time_____ CD # _____

Vertical Mattress Closure **Resident: _____** **Date: _____**

Skin Suturing Steps			**Comments**
Passes needle perpendicular to skin on both sides of skin	Y	N	
Avoids multiple forcep grasps of skin	Y	N	
Instrument ties with square knots	Y	N	
Approximates skin with appropriate tension	Y	N	
Places sutures 0.5 – 1.0 cm. apart	Y	N	
Eversion of the skin edges	Y	N	

Economy of Time and Motion	1	2	3	4	5
	Many unnecessary / disorganized movements		Organized time / motion, some unnecessary movement		Maximum economy of movement and efficiency

Final Rating	**Other Summative Comments:**
❑ Demonstrates competence ❑ Requires further practice	Evaluator _____

Start Time _____

End time_____

Camera _____

CD # _____

Deep Level One Handed Knot

Resident: _____ **Date:** _____

Tension maintained on suture throughout performance	Y	N
Smooth transition between knots	Y	N
Hands crossed at appropriate time to create square knot	Y	N
Traction placed with one hand while knot is slipped down using index finger of the other hand	Y	N

Total time for performance _____ seconds

Economy of Time and Motion	**1**	**2**	**3**	**4**	**5**
	Many unnecessary / disorganized movements		Organized time / motion, some unnecessary movement		Maximum economy of movement and efficiency

Final Rating

❏ Demonstrates competence

❏ Requires further practice

Other Summative Comments:

Evaluator _____

Deep Level Two Handed Knot

Resident: _____ **Date:** _____

Tension maintained on suture throughout performance	Y	N
Smooth transition between knots	Y	N
Hands crossed at appropriate time to create square knot	Y	N
Traction placed with one hand while knot is slipped down using index finger of the other hand	Y	N

Total time for performance _____ seconds

Economy of Time and Motion	**1**	**2**	**3**	**4**	**5**
	Many unnecessary / disorganized movements		Organized time / motion, some unnecessary movement		Maximum economy of movement and efficiency

Final Rating

❏ Demonstrates competence

❏ Requires further practice

Other Summative Comments:

Evaluator _____

Running Fascial Closure **Resident: _____** **Date: _____**

Fascia Closure			**Comments**
Protects bowel while closing	Y	N	
Closes fascia with 1cm bites	Y	N	
Closes fascia with appropriate tension	Y	N	
Utilizes two running sutures (superior and inferior)	Y	N	
Ties fascial sutures with at least six throws	Y	N	
Ties fascial sutures with square knots	Y	N	

Economy of Time and Motion	1	2	3	4	5
	Many unnecessary / disorganized movements		Organized time / motion, some unnecessary movement		Maximum economy of movement and efficiency

Final Rating	**Other Summative Comments:**
❑ Demonstrates competence ❑ Requires further practice	Evaluator _____

Start Time _____

End time_____

Camera _____

CD # _____