

Cedars-Sinai Medical Center

Department of Surgery

Residency Program Handbook

2011-2012

A great source of current information is on our web site at: <http://web.csmc.edu/clinical/clinical-resources/call-schedules/surgery.aspx>

This is under “Call Schedules” under the “Clinical Workstation Home Page”

Table of Contents

PROGRAM GOALS	1
CLINICAL OBJECTIVES	2-3
GOALS AND OBJECTIVES BY YEAR OF TRAINING	4-7
PROFESSIONALISM	8
CORE COMPETENCIES	9-16
FUNDAMENTALS OF SURGERY	17-25
TEACHING FACULTY	26
POLICY OF FACULTY EVALUATION	27
REQUIRED CONFERENCES	28-29
SKILLS SIMULATION EDUCATION CENTER	30-32
POLICY ON EDUCATION-RELATED BENEFITS FOR TRAINEES	33
POLICY ON PROGRAM EVALUATION	34
ORGANIZATIONAL STRUCTURE OF CLINICAL SERVICES	35-36
RESPONSIBILITIES FOR MEDICAL STUDENT EDUCATION	37-38
PARTICIPATION IN RESEARCH	39-41
POLICY ON RESIDENT EVALUATION AND PROMOTION	42-48
POLICY ON RESIDENT ELIGIBILITY	49
POLICY ON RESIDENT SELECTION	50
POLICY ON RESIDENT DUTY HOURS	51-52
RESIDENT FATIGUE AND STRESS POLICY	53-54
POLICY ENSURING RESIDENTS HAVE ADEQUATE REST	55
CONSULTS & BACKUP POLICY	56-57
RESIDENT SIGNOUT POLICY	58
TRANSITION OF CARE POLICY	59-60
SUPERVISORY LINES OF RESPONSIBILITY	61-65
MOONLIGHTING POLICY	66
DEPARTMENT OF SURGERY SUPERVISION POLICY	67-71
OR SUPERVISION POLICY	72-73
ATTENDING COVERAGE	74
CHAIN OF COMMAND	75
CERTIFICATION OF INVASIVE PROCEDURES	76
DOCUMENTATION OF OPERATIVE PROCEDURES	77-79
MINIMUM OPERATIVE CASE VOLUME	80
DRUG ENFORCEMENT (DEA) CERTIFICATION	81
MENTORING	82
POLICY ON RESIDENT TRAVEL FOR PROFESSIONAL ACTIVITIES	83-84
PROFESSIONAL CONDUCT AND ATTIRE	85
OUTPATIENT AND PRIVATE OFFICE ATTENDANCE REQUIREMENT	86
LEAVING THE HOSPITAL WHILE ON CALL	87
FIRE TRAINING	88
POLICY ON EMAIL	89
APPENDIX 1: MATRIX CONFERENCE	90
APPENDIX 2: MENTOR MEETING RECORD FORM	
APPENDIX 3-4: TRAVEL/TIME OFF FORMS	
APPENDIX 5: SIGNOUT TEMPLATE	
APPENDIX 6: SUPERVISION GRID	

PROGRAM GOALS

The goal of the General Surgery Residency at the Cedars-Sinai Medical Center is to provide an educational environment for residents to develop the knowledge and skills necessary to provide a high standard of medical care to patients in their communities throughout their professional medical careers.

The program will impart the knowledge necessary to enable the resident to provide complete care of the surgical patient. Upon completion of the educational program, the surgeon will be capable and qualified in all the components of general surgery as defined by the Accreditation Council for Graduate Medical Education (ACGME).

Specifically, the program will:

- Integrate principles of basic sciences with clinical experiences
- Promote a broad understanding of the role of surgery and its interaction with other medical disciplines, such as general medicine, psychiatry, and pediatrics
- Provide for progressive responsibility from initial patient care to complete patient management
- Foster effective interdisciplinary collaborative relationships
- Provide surgical residents with the ability to function as teachers and consultants
- Foster continuing education to promote lifelong individual initiative and creative scholarship
- Prepare surgical residents to use research technology and skills in conducting studies that assist in solving surgical problems
- Develop professional leadership and management skills
- Promote understanding of the economic, legal, and social challenges of contemporary and future surgery
- Design the curriculum to address each of the ACGME competencies

CLINICAL OBJECTIVES

Updated : June 2011

CURRICULUM OBJECTIVES

Objectives for the surgical curriculum identify what the resident should know and be able to do. At the completion of training, the resident should be able to:

- Manage surgical disorders based on a thorough knowledge of basic and clinical science.
- Demonstrate appropriate skill in the surgical techniques required of a qualified surgeon.
- Demonstrate the use of critical thinking when making decisions affecting the life of a patient and the patient's family.
- Make sound ethical and legal judgments appropriate for a qualified surgeon.
- Collaborate effectively with colleagues and other health professionals.
- Teach and share knowledge with colleagues, residents, students, and other health care providers.
- Teach patients and their families about the patient's health needs.
- Demonstrate acceptance of the value of life-long learning as a necessary prerequisite to maintaining surgical knowledge and skill.
- Demonstrate a commitment to scholarly pursuits through the conduct and evaluation of research.
- Demonstrate leadership in the management of complex programs and organizations.
- Provide cost-effective care to surgical patients and families within the community.
- Respect the religious beliefs of patients and their families and provide surgical care in accordance with those beliefs.

Patient Care and Judgment: The development of sound surgical judgment is an integral part of the skills needed to become a capable general surgeon. The ability to acquire information and integrate it with daily patient care through the examination of the patient, data collection, and the consideration of clinical variables is essential for the capable surgeon.

Technical Skills: The ability to safely perform operative procedures is essential for the surgeon. Manual dexterity, along with sound knowledge of wound healing, principles of tissue handling, and safe conduct of elective and emergency operative procedures, is essential to the resident's development.

Interpersonal Skills: Relationships with patients, hospital personnel, and the community are essential components to becoming a capable physician. Integrity and compassion are considered to be major components of the General Surgery Residency Program.

Scholarly Activity: The acquisition of knowledge and critical evaluation of medical literature is essential to the resident's education. Personal experience in clinical research is essential to developing sound analytic thought processes and utilizing the scientific method to collate data and enhance the body of knowledge of general surgery.

Teaching Abilities: The institution is committed to education as an essential component of excellence in patient care. Each resident must develop the ability to teach in both informal clinical settings and in the more structured settings of Basic Science and Matrix Conferences.

Time Management: Physicians have many demands placed on their most limited resource--time. Residents must learn to appropriately prioritize their activities and commitments to meet the needs of their patients, their ongoing education, their health, and their family. Inability to bring these components into balance will jeopardize the function of a capable surgeon.

Attendance: Each resident is expected to attend to all clinical duties and conferences in a timely fashion. The education of a surgeon is a multifaceted activity that requires group interaction and participation.

Suitability: As determined by the Program Director and the Surgical Education Committee, each resident must meet the expectations of the Department of Surgery. To maintain good standing in the program, the committee must determine that the trainee is capable of becoming a board-certified surgeon in good standing in his/her community.

Progression from the PGY-1 to the PGY-5 level involves a graded increase in responsibility at each resident level commensurate with the resident's skills and abilities. Full-time faculty surgeons who have wide interests and well-honed teaching skills cover each of the surgical services.

GOALS AND OBJECTIVES BY YEAR OF TRAINING

Updated: June 2011

The following **general educational objectives** apply to residents at all levels and characterize the general requirements for successful completion of the residency program. A continuum of achievement in accomplishing these goals throughout residency training will serve as one marker of satisfactory progress.

1. The ability to evaluate surgical patients, including recognition of medical or surgical emergencies which threaten life or limb and require initiation of emergency medical or surgical care.
2. The ability to develop, defend and carry out a rational plan of care for surgical patients.
3. The ability to understand and participate in surgical education and research. All residents are expected to develop proficiency in use of surgical literature. Categorical residents are expected to complete one project that is accepted for publication in a peer-reviewed journal or presented at a major surgical meeting prior to completion of residency training.
4. Demonstration of a humane and considerate approach to patients and family members.
5. Proficiency in written and oral communication in bedside care, case presentations, the medical record and manuscripts.
6. Satisfactory and timely completion of medical record responsibilities.

The following yearly **educational objectives** characterize specific expectations for the professional maturation of residents. Promotion (or program completion in the case of PGY5 residents) will generally be dependent on satisfactory achievement of these objectives.

PGY-1 residents are expected to accomplish and maintain the following objectives:

1. Establish basic proficiency in the evaluation of patients under routine and emergency circumstances (recognizes surgical emergencies, performs a history and physical examination, orders appropriate basic ancillary studies, effectively communicates findings to other physicians).
2. Establish basic proficiency in providing pre-operative and post-operative care (writes appropriate pre-op and post-op orders for floor patients, handles nursing calls appropriately, manages most routine postoperative care with minimal intervention by supervisors).
3. Develop a working knowledge of common problems in general surgery, vascular surgery, surgical oncology and trauma (achieves acceptable grade on rotation evaluation).
4. Acquire basic operative skills necessary to perform less complex surgical procedures, such as hernia repair, central line procedures and minor outpatient surgery.
5. Develop personal values and interpersonal skills appropriate for the surgical resident (is available at required times, gives patient care needs highest priority).
6. Begin a regular program of reading and study, using a major surgical textbook
7. Perform comprehensive histories and physicals. Communicate findings to senior residents and other team members
8. Evaluate laboratory and radiographic studies by directly viewing these studies and communicating results to senior residents
9. Arrive in the operating room on time and prepared with a knowledge of the applicable anatomy and physiology.

10. Providing care for patients assigned, follow up on issues, and communicating issues with the senior residents and attendings
11. Provide for the day-to-day care of patients
12. Assist in the operating room
13. Begin to learn surgical technique under the direct supervision of attending surgeons
14. Learn the basics of postoperative care in the hospital and in the clinic
15. Teach rotating medical students
16. Develop interpersonal skills to optimize patient care among all members of the healthcare team.
17. Master basic pathophysiology of surgical disease
18. Familiarize themselves with our Matrix Conference program through increasing participation in discussions at this weekly conference.

PGY-2 residents are expected to accomplish and maintain the following objectives:

1. Develop enhanced proficiency in the provision of pre-operative and post-operative care (manages pre-operative and post-operative care of complex patients with minimal intervention by supervisors).
2. Establish a knowledge base and skill proficiency for the management of the critically ill surgical patient and the burned patient (achieves acceptable grade on rotation evaluation, can place endotracheal tube, S-G catheters, and arterial lines).
3. Develop organizational and teaching skills necessary for basic management of a surgical service (attends to organizational duties of service such as organizing rounds and teaching sessions).
4. Increased skill in operative technique required for procedures of increasing surgical complexity, such as skin grafting, more complex hernia repairs and complex soft-tissue surgery (is able to perform these operations with minimal assistance).
5. Provide in house coverage in the intensive care unit while on the SICU rotation
6. Develop interpersonal skills in the joint management of patients in the SICU
7. Continue a program of regular study of a basic textbook of surgery
8. Perform comprehensive histories and physicals
9. Convey appropriate information to senior residents
10. Formulate plans of care based on acquired information
11. Understand decision making processes used in the care of surgical patients
12. Understand the anatomy of surgical procedures. Know the procedure well the night before and arrive in the OR on time and well prepared.
13. Develop a postoperative plan of care with the senior residents and attendings and help implement that plan.
14. Provide day-to-day care of patients
15. Familiarize themselves with our Matrix Conference program through increasing participation in discussions at this weekly conference.
16. Teach interns and rotating medical students

PGY-3 residents (“946”) are expected to accomplish and maintain the following objectives:

1. Continues to develop technical skills necessary for the performance of more complex surgical procedures in general, pediatric, and minimally invasive surgery (performs laparoscopic cholecystectomy, small bowel resection, and other procedures of similar complexity).

2. Acquire proficiency in surgical endoscopy (successfully performs colonoscopy, EGD, anoscopy, bronchoscopy).
3. Establish a knowledge base, judgment and interpersonal skills necessary to function as a surgical consultant (successfully manages simple consults with minimal help).
4. Develop enhanced skills in the management of a surgical service (manages service administrative duties assigned by chief resident or faculty).
5. Proficiency in the rational use of surgical literature and evidence-based medicine (defends discussions and recommendation with scientific evidence).
6. Develop knowledge and skills necessary to function as the trauma team leader for both adult and pediatric patients (successfully directs trauma resuscitation).
7. Provide in house coverage for consultations and emergency room admissions
8. Assist at trauma admissions
9. Teach junior residents in the emergency room, and on rounds
10. Continue a program of reading and study of basic surgical material, as well as one or two journals on a regular basis
11. Refine interpersonal skills
12. Learn more advanced surgical techniques
13. Back up the residents in the SICU if needed
14. Presentations at Matrix Conference.
15. Teach rotating medical students

PGY-4 residents are expected to accomplish and maintain the following objectives:

1. Continue to develop knowledge and skills necessary for the complete management of common problems in general surgery and minimally invasive surgery, vascular surgery, and thoracic surgery (manages most common problems with minimal assistance).
2. Enhanced proficiency for functioning as the trauma team leader for both adult and pediatric patients (successfully directs trauma resuscitation).
3. Satisfactory performance as a teacher of junior residents and medical students (receives acceptable feedback from students and peers).
4. *Competently manage a housestaff team in the perioperative care of the patient.*
5. *The major focus should be on broadening the depth of understanding of surgical illness, including basic science of surgery, non-operative and operative options, complications and their prevention, and surgical judgment.*
6. Provide supervision of junior residents in carrying out patient care responsibilities
7. Review notes as appropriate with junior residents
8. Review laboratory data and studies with junior residents
9. Assist junior residents in the development and conduct of plans of care
10. Communicate details to attendings as appropriate
11. Master the sophisticated pathophysiology of surgical patients
12. Master the details of preoperative preparation of hospitalized patients and outpatients
13. Master the details of an operative plan along with an understanding of risks, benefits, alternatives and complications.
14. Work with the attending surgeon in the development of a postoperative plan of care
15. Supervise junior residents in the execution of care plans
16. Educate junior residents and medical students
17. Refine interpersonal skills
18. Learn surgical techniques
19. Become conversant with a few surgical journals

20. Conduct a regular program of advanced reading and study
21. Conduct daily rounds
22. Presentations at Matrix Conference.

PGY-5 usually given the greatest responsibility in the operating room and in the management of non-operative patients, but also has the greatest responsibility in managing the team of residents that he/she leads. Most importantly, this is *leadership by example*. In addition, residents are expected to accomplish and maintain the following objectives:

1. Develop knowledge and skills necessary to assume complete responsibility for the management of the surgical patient, including mastery of the fundamental components of surgery as defined by the American Board of Surgery (achieves acceptable score on written and oral examinations and receives acceptable evaluations).
2. Proficiency in management of complex problems in general surgery, minimally invasive surgery, and surgical oncology (treats complex problems in the discipline with minimal help).
3. Demonstrates personal and professional responsibility, leadership skills and interpersonal skills necessary for independent practice as a specialist in surgery (successfully manages the chief resident services).
4. Provides supervision of junior residents in carrying out patient care responsibilities for the group of patients assigned by the chief resident.
5. Communicates details of patient progress to the appropriate attending
6. Develops a sophisticated understanding of the pathophysiology of surgical diseases represented on the service
7. Is directly involved in preoperative management (especially co-morbid factors) and decision making along with the attending
8. Arrives in the operating room on time and armed with an in depth knowledge of the anatomy of the subsequent procedure along with an understanding of appropriate physiology, surgical alternatives, risks, benefits and options.
9. Develops a plan for postoperative care with the attending and helps carry it out
10. Provides post-hospital follow-up in clinic
11. Is an example of excellent interpersonal skills with all other members of the health care team
12. Serves as a role model and consultant for junior residents
13. Serves as an educator of medical students and junior residents
14. Carries out administrative tasks as requested by the Program Director
15. One or Two Chief Residents are selected annually as 'Administrative Chief Resident' to assist the Program Director with administrative matters such as scheduling, etc. The Administrative Chief may request and should expect, other Chief Residents to assist with these tasks.
16. Assists in assuring coverage of the assigned service
17. Presentations at Matrix Conference.
18. Review OR schedule the night before to assign cases to junior residents
19. Provide in-house coverage for trauma patients
20. Conduct daily rounds on all patients on the service
21. Provide backup for the 946 resident and the SICU residents as needed
22. Enhanced proficiency for functioning as the trauma team leader for both adult and pediatric patients (successfully directs trauma resuscitation).

PROFESSIONALISM

The following **critical requirements** must be met by all members of our professional community, regardless of level of training. The inability to meet any one of them may be cause for dismissal from the program. These critical requirements are:

1. Residents must act with complete honesty and integrity in the treatment of patients and in research.
2. Residents must act in accordance with the responsibilities inherent in the surgeon-patient relationship.
3. Residents must interact in a professional manner with physicians, students, nurses and other members of the health care team.
4. Residents must support the core values of our residency program.

CORE COMPETENCIES

The ACGME has defined six areas for which programs must ensure that residents become competent at the level expected of a surgical practitioner. The program must define specific knowledge, skills, and attitudes required and provide educational experiences for residents.

1. **Patient Care**

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Surgical residents must:

- demonstrate manual dexterity appropriate for training level
- be able to develop and execute patient care plans appropriate for the resident's level

Specific Knowledge

Residents obtain knowledge through daily patient care and observation of the faculty, who are role models for providing the standard of practice. Didactic conferences provide the knowledge base required to execute patient care plans.

Skills

Manual dexterity skills are taught through clinical activities in the operating room and with simulators. A skills laboratory using computer-based modules is available to the residents for practice in manual dexterity.

Through supervised, progressive operative experience, the resident performs more complex operative procedures as he/she advances in training. At the senior level, the resident performs complex surgical procedures with faculty supervision.

Attitudes Required

The qualified surgeon must exhibit compassion, integrity, industry, and interpersonal skills. The resident works with the faculty to admit patients, order diagnostic and therapeutic interventions, perform daily rounds, participate in the operating room, and provide postoperative care. The resident meets with families and interacts with social service, discharge planning, and other care providers. These activities enable the resident to develop the ability to execute patient care plans.

Educational Experience

Education in manual dexterity and the development of patient care plans occurs through patient care activities on the clinical services. These activities occur in the patient units, operating room, and outpatient offices or clinics.

Assessment

Progress in obtaining knowledge related to patient care is measured through global ratings at the end of each rotation as well as a summative evaluation by the Surgical Education Committee. The annual resident oral examination provides an assessment of the resident's knowledge related to patient care.

The Surgical Education Committee monitors development of manual dexterity through global ratings at the completion of each rotation and the summative evaluation. The resident operative log provides measurable data regarding the resident's progress, along with the portfolio the resident generates throughout the year.

2. **Medical Knowledge**

Residents must demonstrate knowledge of established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Surgical residents are expected to critically evaluate and demonstrate knowledge of pertinent scientific information.

Specific Knowledge

Through the curriculum conferences, the components of basic science related to surgery, as well as the clinical components, are taught. Postoperative care of patients, especially in the critical care units, provides a basis for teaching biomedical science. Surgical Grand Rounds, Matrix and Basic Science Conferences, visiting professor lectures, journal club, and specialty conferences provide additional forums for obtaining medical knowledge.

Clinical research is an integral part of the program. By developing background information and completing a project, the residents develop the ability to critically evaluate scientific information.

Skills

The curriculum conferences and journal clubs provide a structured environment for developing study skills needed to acquire scientific information. During rotations on clinical services, the residents synthesize the scientific knowledge obtained through the didactic program. Supervised patient care reinforces this knowledge. The scholarly activity program enables residents to critically evaluate the literature and assimilate information related to a specific clinical topic.

Attitude

The attitude required to develop scientific knowledge is defined by fostering open inquiry in the structured and informal teaching environment. The residents are encouraged to seek and teach information as part of daily patient care.

Educational Experience

Education occurs through activities on the clinical services along with the curriculum conferences, department conferences, and scholarly activity. The residents also attend regional and national educational conferences.

- a. Biomedical knowledge is provided through the basic science and clinical curricula. In addition to an assigned reading program, the residents review topics selected from missed questions on the prior year's in-training examination. Biomedical science is taught during patient care rounds.
- b. Clinical knowledge is taught during daily patient care activities of the clinical teams. The patient's pathophysiology is discussed, and in-depth clinical knowledge is conveyed on rounds and in the operating room,

Assessment

Acquisition and application of medical knowledge is evaluated through the annual in-training and oral examinations, global ratings at the end of each rotation, and a summative evaluation by the Surgical Education Committee. Attendance records are maintained and monitored in the Department of Surgery.

3. **Practice-Based Learning and Improvement**

Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are expected to develop skills and habits to be able to meet the following goals:

- Identify strengths, deficiencies and limits in one's knowledge and expertise
- Set learning and improvement goals
- Identify and perform appropriate learning activities
- Systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement
- Incorporate formative evaluation feedback into daily practice
- Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- Use information technology to optimize learning, and
- Participate in the education of patients, families, students, residents and other health professionals.

Surgical residents are expected to:

- critique personal practice outcomes
- demonstrate recognition of the importance of lifelong learning in surgical practice

Specific Knowledge

The resident evaluates his/her personal performance and clinical outcomes as part of daily patient care activities. This includes seeking information on patients under their care in appropriate textbooks and journal articles. Discussions of cases presented at Matrix conference and weekly case conference enhance the resident's knowledge of patients under his/her care.

The value of lifelong learning using the practice-based format occurs through the role modeling of surgical faculty, peer instruction, and preparation for board certification. The residents are provided membership in the Resident & Associate Society of the American College of Surgeons. Each senior resident is required to attend a meeting of the American College of Surgeons, whose organizing principle was the establishment of ongoing education for the practicing surgeon.

Skills

Skills for practice-based learning are taught to the residents through lectures, journal club, teaching on patient care rounds, and by faculty example. The oral examination and required certification in ACLS and ATLS encourage lifelong learning. The in-training examination sets a standard for educational achievement as a resident advances through the program.

Attitudes

The attitude needed to establish practice-based learning is achieved through the environment created within the department by the faculty and by the residents in the program.

Educational Experience

Clinical rotations, in conjunction with standard teaching conferences provide the educational milieu in which practice-based learning can be achieved. The residents participate actively in these events.

Assessment

Evidence of practice-based learning by the residents is documented through their portfolios, in-training and oral examinations, and global ratings based on performance during teaching rounds and weekly conferences.

4. **Interpersonal and Communication Skills**

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and other health professionals. Residents are expected to:

- Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
- Communicate effectively with physicians, other health professionals, and health related agencies
- Work effectively as a member or leader of a health care team or other professional group
- Act in a consultative role to other physicians and health professionals, and
- Maintain comprehensive, timely, and legible medical records.

Surgical residents are expected to:

- communicate effectively with other health care professionals
- counsel and educate patients and families
- effectively document practice activities

Specific Knowledge

Effective communication is defined for the residents as the ability to interact verbally and in writing to facilitate the patient's care. Communication includes personal and telephone conversations, chart documentation, and record keeping.

Teaming with the patient, family, and other health professionals is accomplished in a considerate manner by recognizing the other participants as competent, capable individuals who participate in the process of returning the patient to his/her family in good health.

Skills

Clarity in written and verbal communication is essential. Communication must be provided in a timely manner with respect and compassion for the patient, his/her family, and members of the health care team. Effective communication requires honesty and regard for the patient's understanding of medical vocabulary.

The development of empathy and consideration for the patient and his/her family are crucial to effective collaboration with the patient, family, and health professionals. Accurate and prompt information must be provided through both written and verbal communication to facilitate the care of the patient.

Attitudes

Effective communication requires a humanistic attitude using both secular and religious philosophies. Communication must be tailored appropriately for the particular patient and circumstance.

Educational Experience

The educational experience occurs through the resident's participation with the patient care team. In the daily care of patients, effective verbal communication opportunities arise through interaction with nurses, therapists, and families. Experience in written communication is obtained through daily chart notes, operative note dictation, and discharge summary preparation. The didactic educational experience is provided through the general surgery curriculum (i.e., Matrix conference and case conferences).

Assessment

Global evaluations at the end of each clinical rotation and evaluations completed by ancillary staff provide an assessment of the resident's development. Resident portfolios also assess the development of interpersonal and communication skills. Maintaining his/her operative log on a timely basis is another measure of effective communication by the resident.

5. **Professionalism**

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:

- Compassion, integrity, and respect for others
- Responsiveness to patient needs that supersedes self-interest
- Respect for patient privacy and autonomy
- Accountability to patients, society and the profession, and
- Sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.

Surgical residents are expected to:

- maintain high standards of ethical behavior
- demonstrate a commitment to continuity of patient care
- demonstrate sensitivity to age, gender, and culture of patients and other health care professionals

Specific Knowledge

Specific knowledge regarding ethical behavior is gained through formal and informal meetings with the program director and the hospital leadership (i.e., department chairman, Director of Medical Education). The ethical standard of behavior for the surgical resident is to conduct himself with a level of integrity that will earn the respect of peers, the community, and the profession.

Continuity of care is taught to surgical residents through the organization of the resident teams and their daily activities. Continuity of care is defined as the daily attendance to the preoperative and postoperative needs of patients, as well as participation in outpatient evaluation and postoperative follow-up.

Specific knowledge regarding sensitivity to age, gender, and culture is a standard that all residents are expected to maintain. Residents must be cognizant of the special needs of others with attention to individual sensitivities.

Skills

The following skills are taught to the surgical resident regarding professionalism.

- a. The resident is instructed to interact with his/her patients and fellow health care workers in an honest, considerate manner appropriate for his/her position as a physician.
- b. Making daily rounds and evaluating patients with the team is an essential part of the educational program. The resident learns documentation through chart notes and personal communication with the attending surgeon. Residents are instructed in outpatient surgical management through participation in outpatient surgical clinics and private offices.
- c. Respect for patient and peer sensitivities is taught through interaction and active use of the literature to assure consideration of specific patients' needs and concerns.

Attitudes

The residents are expected to develop an attitude that brings to their patients a caring, honest countenance at all times, regardless of the patients' varying personal characteristics.

Educational Experience

The development of professionalism occurs through the resident's participation with a clinical team caring for patients. The resident applies the skills that he/she has developed during inpatient and outpatient interactions. Mentoring and role modeling by attending faculty is critical in this educational process. As a member of the team, the resident can observe the faculty in a close one-on-one relationship. The institutional curriculum includes relevant sessions for the development of professionalism as a key component of a caring physician.

The general surgery residency curriculum addresses the issues of ethics, care of the elderly patient, and care of the pediatric age group through journal club, curriculum topics, and Grand Rounds.

Consideration for the culture of patients is expected on all surgical services in which the resident participates. In addition, the residents see underprivileged members of our community in the clinic setting. This population includes individuals of varying ethnic and cultural backgrounds. The residents develop the skills to interact with these individuals and respond to their specific need.

Assessment

The development of professionalism is monitored through several evaluation tools, including the global rating at the end of each clinical rotation and the summative rating by the Surgical Education Committee. Nursing and peer evaluations are also useful in assessing professionalism. Resident portfolios will be used to evaluate development of professionalism. Participation in office hours and the surgical clinic, as a demonstration of professionalism, is monitored.

6. **Systems-Based Practice**

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents are expected to:

- Work effectively in various health care delivery settings and systems relevant to their clinical specialty
- Coordinate patient care within the health care system relevant to their clinical specialty
- Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate
- Advocate for quality patient care and optimal patient care systems
- Work in interprofessional teams to enhance patient safety and improve patient care quality, and
- Participate in identifying system errors and implementing potential systems solutions.

Surgical residents are expected to:

- practice high quality, cost effective patient care
- demonstrate knowledge of risk-benefit analysis
- demonstrate an understanding of the role of different specialists and other health care professionals in overall patient management

Specific Knowledge

The cost of various therapies is discussed with residents in the clinical and conference settings, providing specific knowledge in delivering high quality, cost-effective care. Risk-benefit analysis occurs daily on the clinical services as decisions are made regarding diagnostic tests or treatment for a patient. This same process occurs in the operating room as decisions are made during the surgical procedure.

Patient management is conducted as a team effort on all clinical services with appropriate use of specialists and other health professionals to optimize patient care (i.e., physical therapy, social service, discharge planning, and home care).

Skills

The efficacy as well as cost of alternatives to care for patients on the residents' clinical services is part of the daily discussion on rounds. This data is assimilated by the residents throughout their training. The development of decision-making skills is a major goal of the program. The residents are expected to develop these skills through active role modeling of the attending faculty as well as integrating the knowledge they have gained

in the formal program curriculum. The surgical resident must learn the skills that can be brought to patient care by various appropriate specialists and recognize the benefit to their patients through the appropriate use of other members of the health care team.

Attitude

The resident is expected to develop a team approach to patient care, recognizing the value of a group effort to obtain the optimum outcome for the patients. The residents are instructed in the integration of their personal role into this team, recognizing that they must assume the leadership role as a responsible physician while respecting the skills of other members of the patient care group.

Educational Experience

Education occurs through the clinical rotations to which the residents are assigned. On a daily basis, the residents participate in a systems-based practice. Through consultation with specialists and conferences with health care providers involved in a patient's care, the residents learn the skills necessary to focus on the individual's needs.

Assessment

Evaluation of the learning of systems-based practice is conducted by the 360° evaluation, the annual oral examination, the global evaluation, the resident's portfolio and the in-training examination

FUNDAMENTALS OF SURGERY

KNOWLEDGE COMPONENTS

The general surgery residency program is designed to provide the resident with a clear progression of responsibility. **Technical knowledge** in the art and science of surgery is acquired in a progressive fashion through clinical rounds, conferences, and research.

Daily rounds with the attending staff provide an opportunity for residents to enhance their clinical knowledge as they advance through the program. Clinical problems and pertinent teaching points are brought to the attention of the medical students and junior-level residents. Relevant questions are asked, and the resultant discussions generate specific teaching points about the patients' pathologic problems.

The discussion is brought to a conclusion by the chief resident who as both student and teacher, shares his/her fund of knowledge with the junior residents and medical students. During morning rounds, residents and medical students may identify new clinical problems in the patients under their care. Their decisions are reviewed by the chief resident prior to entering the operating room. When morning rounds are attended by a staff surgeon, another level of technical knowledge is provided to the residents on the service.

Technical knowledge is taught at all levels of the program in structured didactic conferences. As leader of the curriculum topic for the week, the chief resident presents information in a formal fashion and directs the attention of junior residents to key clinical facts. The conferences are attended and supervised by a faculty surgeon.

This format is also used in the weekly Matrix conference. At these conferences, senior residents may comment on the surgical aspects of a patient's care and provide information obtained from the literature about outcome and alternate methods of management that should have been considered.

Research is another method by which the residents obtain progressive technical knowledge. During the first year of training, junior residents are encouraged to ask clinical questions and to critically review the published medical literature. As the residents progress, they are encouraged to focus their areas of interest by conducting clinical research projects. These activities prepare the residents to meet national standards and to obtain the knowledge and skills required for optimum patient care.

An important benefit of resident participation in research is the generation of scientific information that is presented at regional and national medical meetings. The residents have an opportunity to meet leaders in the field and to assimilate knowledge gained by attending the meeting.

The development of **interpersonal skills** is encouraged throughout the program. Although residents interact with people at many levels in the hospital community, the development of appropriate interpersonal skills in their relationships with patients is of utmost importance. Junior residents observe the communication of attending surgeons and chief residents and are

encouraged to develop relationships with patients that are appropriate for their own personalities. The ability to establish a close, personal rapport with patients is one of the most important outcomes of training.

Throughout the program, residents learn to relate to medical students assigned to their clinical services in a patient and understanding way. The residents learn to assess the abilities of the students in order to assign tasks appropriately.

Monitoring the development of interpersonal skills occurs both formally and informally. Resident interactions with colleagues, hospital staff, and patients are evaluated. The program director counsels residents immediately when he is alerted to interpersonal problems that have occurred with hospital staff. The program director provides constructive recommendations, and when necessary, refers the resident for additional counseling.

Progressive development of **psychomotor skills**, acquired through observation and repetitive actions, is an integral part of the general surgery residency. The skill of each surgery resident in the operating room develops at varying rates. Over the course of the 5-year training program, the resident acquires the psychomotor skills that enable him/her to become a capable, safe clinical surgeon. The surgical skills laboratory is available for clinical teaching and research. Residents, following a PGY-specific curriculum, are supervised through progressive laparoscopic/simulation techniques. This course is useful for developing skills that can be transferred directly to the clinical setting in the operating room.

As the residents progress, they are given increasing responsibility in the operating room, performing surgical procedures that require psychomotor skills consistent with their abilities and level of training. PGY1 residents frequently act as first or second assistants on surgical procedures, at which time they observe the skills of the more senior residents and the attending surgeons. This enables them to acquire information that can be stored, synthesized, and used when they have primary operative responsibilities. PGY1 residents may perform simple, standardized operative procedures such as removal of skin lesions, uncomplicated inguinal herniorrhaphy, appendectomy, minor amputations, and drainage of abscesses.

PGY2 and PGY3 residents develop increasing psychomotor skills through their activities as first assistant on major operations and while opening and closing the operative field on major cases. They may perform operative procedures commensurate with their abilities, such as complex inguinal herniorrhaphy, cholecystectomy, small bowel resection, breast surgery, and right colectomy. PGY4 and PGY5 residents acquire the skills needed to perform more complex operative procedures such as gastric or pancreatic surgery and vascular reconstructions. These operations are performed with supervision by the attending staff. The residents are counseled throughout the operative procedures so that they may benefit from the experience of the attending surgeon.

The development of **sound surgical judgment** in the operating room is an integral part of the program. Residents are given responsibility in the operating room to a degree compatible with their level of training, technical knowledge, and psychomotor skills. In the course of the five-year program, each resident will have reached the goal of developing sound clinical judgment. The attending surgeon is present at each operation. This is an especially important component of the program since it allows the operating residents to review their clinical decisions and obtain

immediate feedback. An increasing degree of independence is granted to the residents as they progress through their training and develop the skills necessary to operate safely.

CURRICULUM OBJECTIVES

Objectives for the surgical curriculum identify what the resident should know and be able to do. At the completion of training, the resident should be able to:

- Manage surgical disorders based on a thorough knowledge of basic and clinical science.
- Demonstrate appropriate skill in the surgical techniques required of a qualified surgeon.
- Demonstrate the use of critical thinking when making decisions affecting the life of a patient and the patient's family.
- Make sound ethical and legal judgments appropriate for a qualified surgeon.
- Collaborate effectively with colleagues and other health professionals.
- Teach and share knowledge with colleagues, residents, students, and other health care providers.
- Teach patients and their families about the patient's health needs.
- Demonstrate acceptance of the value of life-long learning as a necessary prerequisite to maintaining surgical knowledge and skill.
- Demonstrate a commitment to scholarly pursuits through the conduct and evaluation of research.
- Demonstrate leadership in the management of complex programs and organizations.
- Provide cost-effective care to surgical patients and families within the community.
- Respect the religious beliefs of patients and their families and provide surgical care in accordance with those beliefs.

PREOPERATIVE AND POSTOPERATIVE CARE

Resident involvement in **preoperative and postoperative care** of patients is a critical part of the general surgery residency. The 5-year program is designed to provide progressive responsibility.

PGY1 general surgery residents obtain pre-hospital experience with patient care through the surgery clinic (ACC). The residents perform the initial evaluation of patients as they present to the outpatient clinic. With supervision by the chief resident, they formulate a diagnosis and tentative treatment plan.

The PGY1 resident performs the initial history and physical examination of patients admitted to the hospital and may order routine preoperative studies. Specialized diagnostic studies are ordered as appropriate after discussion with the chief resident and attending surgeon. The resident is closely supervised in these areas during this phase of training.

The PGY1 resident obtains first-hand experience evaluating the postoperative patient's condition during morning rounds. The resident makes pertinent clinical observations, collates available data, and initiates the treatment plan for the day. This work is closely supervised by the senior resident during morning rounds before entering the operating room. Information is given to the attending surgeon, who provides appropriate monitoring and critique at that time. Post-hospital experience in PGY1 is obtained in the surgery clinic or private physicians' offices, where the resident may see patients who were under his/her care on the inpatient service.

As a Level I Trauma Center, all multiple-injury patients are admitted directly to the trauma resuscitation area. General surgery residents on the trauma team treat these patients, led by a staff surgeon. The trauma attendings provide 24-hour coverage in the hospital. The trauma service enables PGY1 residents to participate in the preoperative and postoperative care of the multiple-injury patient. The attending surgeon directs the residents on the trauma team in the initial assessment and resuscitation of patients. The PGY1 resident participates in the initial assessment of the patient's injuries and obtains experience placing monitoring lines and drainage tubes. He/she follows the patient through the operative and postoperative course.

In **PGY2** pre-hospital experience is obtained in the offices of attending surgeons and in the clinic. The resident also has contact with ambulatory patients in the emergency room. The resident is allowed increased responsibility in ordering diagnostic tests, but therapeutic decisions are still monitored by the senior resident and attending surgeon. Preoperative responsibilities include the initial history and physical examination and ordering routine and more complex diagnostic studies. The resident formulates the treatment plan for the patient and recommends diagnostic studies to confirm the diagnosis. The resident helps prepare the patient for surgery by implementing and supervising appropriate nutritional support as well as by placing appropriate monitoring lines prior to surgical intervention.

Postoperatively, the PGY2 resident participates in morning rounds and makes an initial clinical assessment. The resident has more latitude to make therapeutic decisions and initiate treatment following review and approval by the senior resident and the attending surgeon. Post-hospital experience is obtained in the attending surgeon's office and in the clinic.

PGY3 residents obtain pre-hospital experience by participating in office hours with the attending surgeons and in clinic (ACC). The resident gains experience examining new patients, determining diagnoses, and establishing tentative treatment plans for review with the staff surgeon. In the emergency room, the PGY3 resident evaluates patients who are admitted through this ambulatory unit. This resident is frequently given authority, by either the chief resident or the attending surgeon, to admit patients to the hospital and, with appropriate supervision, initiate therapy.

In PGY3, preoperative experience consists of reviewing the history and physical examination of patients admitted to the surgical service, confirming key findings, and discussing the treatment plan with the junior residents. The resident is allowed increased responsibility in ordering diagnostic studies and, in consultation with the attending surgeon, may institute the treatment program. He/She supervises the preoperative preparation and the placement of appropriate monitoring lines.

During morning rounds, the PGY3 resident monitors the junior resident's activities and evaluates the immediate postoperative patients and patients with difficult clinical problems requiring more skilled supervision and mature judgment. The chief resident or attending surgeon reviews this activity. Post-hospital experience is obtained in the private offices of attending surgeons or in the clinic. The resident sees patients who have undergone surgical procedures and are returning for continued care.

On the trauma service, the PGY3 resident supervises trauma resuscitation, prioritizes treatment, orders appropriate studies, and oversees junior residents performing specific therapeutic interventions. The resident contacts and advises appropriate consultants regarding evaluation of

the multiple-injury patient, supervising the overall care of the patient. Postoperatively, the PGY3 resident supervises the junior residents during morning rounds, reviews serious clinical problems, and initiates diagnostic studies and therapeutic alterations with supervision by the attending surgeon. Participation in the ACC Clinic enables the resident to follow patients discharged from the inpatient trauma setting.

In **PGY4** pre-hospital experience is obtained in the surgeons' private offices and in the emergency room. In the surgeon's office, the resident evaluates the clinical problem and formulates a diagnosis and tentative treatment plan, which is reviewed with the attending surgeon. In the emergency room, the resident may assess patient problems, order diagnostic tests, and recommend/institute minor therapeutic procedures. Major problems requiring operative intervention are reviewed with the attending surgeon.

The PGY4 resident reviews new patient admissions and confirms pertinent findings from the history and physical examinations obtained by junior residents. The resident reviews the treatment plan, orders specific diagnostic tests, and confers with the attending surgeon regarding patient management. He/She supervises morning rounds, sharing information with the junior residents about the status of the patients and discussing alterations in patient management. The resident reviews the operative procedure along with the risks and benefits with the patients and supervises the preoperative preparation of patients for surgery by the junior resident.

In **PGY5** the resident sees pre-hospital patients in the private surgeons' offices, the surgery clinic, and the emergency room. In these settings, the resident has first-hand experience evaluating new patients as they present with their clinical problems. In the clinic, the chief resident supervises the junior residents' initial assessments and makes recommendations regarding clinical management. In the emergency room, the PGY5 resident assesses the junior residents' evaluations and recommends diagnostic studies and therapeutic intervention. The attending surgeon reviews the resident's assessment and recommendation for treatment.

The chief resident's role in preoperative care is as supervisor and primary surgeon. He/She evaluates the physicals performed by the junior residents and reviews the pertinent findings, assesses their tentative treatment plans, and institutes appropriate diagnostic studies. Recommendations for therapy and operative intervention are reviewed with the attending surgeon. The chief resident oversees the preparation of the patient for surgery through the junior residents.

During morning rounds, the chief resident evaluates clinical problems and tentative treatment plans, affirming or modifying the junior residents' recommendations, as appropriate. Patients with major clinical problems are evaluated, and therapeutic interventions are implemented after review with the attending surgeon. The PGY5 resident assists in planning for patient discharge by interacting with discharge planning and outpatient services. Post-hospital experience is obtained in the private physicians' offices and in the surgery clinic. In the clinic, the PGY5 resident follows patients who have undergone surgery while under his/her care, enabling the resident to evaluate the long-term effects of his/her surgical intervention.

OUTPATIENT EXPERIENCE

All general surgery residents are required to spend one-half day per week in the clinic or private office during general surgery and subspecialty rotations (except ICU). Each session should include exposure to **at least** 5 patients who will be entering the hospital or are being seen following a surgical procedure. This requires cooperation by the attending surgeons to integrate residency teaching into their office practices.

Supervision in surgery clinic is provided by the chief residents and the attending surgeon. In the emergency room, the chief resident and the appropriate attending surgeon supervise the junior residents. On the clinic service, patients treated in the hospital are followed as outpatients by a resident, usually the one who has been involved in the patient's operative treatment. In clinic, the resident develops independent responsibility for evaluating new patients and establishing a diagnosis and treatment plan. Decisions are reviewed with the supervising surgeon in the clinic. The resident obtains longitudinal perspective about the patient's care either at the time of admission to the hospital or through repeat visits to the clinic. Long-term patients in the clinic enable the resident to participate in treatment through the course of a particular disease. The resident may make clinical decisions regarding changes observed in the patient's problems that require alterations in the treatment program. Supervised, but independent, responsibility is encouraged and monitored.

Residents are required to attend office hours of the surgeons on their services. In the private offices, residents may participate in the evaluation of new patients prior to or in conjunction with, the attending surgeon. The format of new patient encounters is at the discretion of the attending surgeon. These experiences allow the resident to formulate an initial clinical impression and make a decision regarding subsequent care of the new surgical patient seen in the office. The plan is discussed with the attending surgeon and modified, as needed. The resident may see the same patients when they are admitted to the corresponding inpatient service and/or when they are discharged from the hospital. The resident develops progressive interpersonal skills and learns psychomotor skills of minor office procedures through these encounters. Responsible patient management is learned, not only by example, but also by direct participation in evaluating postoperative patients. Likewise, skills for managing outpatient surgical problems are developed.

Each resident is required to submit a record of outpatient encounters weekly, consisting of a list of patients seen, the date of the session, and the supervising surgeon. This data is reported to the program director and reviewed at the time of the semi-annual interview. Adequate outpatient experience is required for resident promotion.

EMERGENCY ROOM

General surgery residents participate in the care of the patients seen in the **emergency room**. Patients seen in the emergency room may be self-referred or sent by their primary-care physicians with instructions to be seen by the resident staff or an attending surgeon. The full-time emergency room physician usually sees self-referred patients first. When surgical consultation is needed, the resident may be the first member of the surgical staff to see the patient. Frequently, these patients are followed by the residents who evaluate them initially, providing continuity of care for the patient and educational experience for the resident.

The junior resident (946 Resident) sees a patient in the emergency room and establishes a preliminary diagnosis and differential. The resident may order simple diagnostic studies and subsequently reviews the findings with the senior resident or attending surgeon. The supervising surgeon sees the patient and discusses the preliminary treatment plan with the resident. More complex studies and diagnostic procedures may be ordered, and recommendations for surgical intervention are affirmed or modified.

The surgery resident's activity in the emergency room is supervised entirely by the Department of Surgery staff. At no time are these residents under the direction of the emergency room physicians.

AMBULATORY SURGERY

Residents obtain experience in **ambulatory surgery** as a component of the inpatient surgery rotations. Each resident should spend time at the 310 Ambulatory Surgery Center and participate in operative procedures. If this program is followed, the resident will have exposure to a variety of ambulatory surgical procedures by the end of training.

In the ambulatory surgery facilities, the resident evaluates the patient's specific problem for which the procedure is planned. Diagnostic procedures are ordered in the physician's office or through the clinic. The preliminary treatment plan is made by the resident, who performs the operation under the direction of the chief resident or the responsible attending surgeon. For private patients, the attending surgeon is the supervisor. For clinic patients, it may be the chief resident or the attending surgeon. If the chief resident is the supervising surgeon, the attending surgeon must be available in the operating suite or scrubbed in the operating room.

Ambulatory surgery patients are seen postoperatively in the clinic by the junior residents under the supervision of the chief resident who was responsible for the operative procedure. The patients may be seen in the private surgeons' offices where the resident obtains experience in evaluating the postoperative convalescence of the patient.

BASIC SCIENCE

Education in **basic science and human biological phenomena** occurs throughout the general surgery residency. The organization of the clinical services into resident teams provides ongoing daily interaction with attending surgeons. Discussions regarding the pathophysiology of the patients' disorders and the human biological phenomena relevant to the disease processes are held. Examples include:

- the scientific basis for selection of operative procedures on the alimentary tract, such as acid production mechanisms of the stomach or secretion of hormones by the upper gastrointestinal tract related to the feedback mechanisms of the neuroendocrine system
- pathophysiologic events related to the biological phenomena of hemodynamic disorders in patients with vascular occlusive disease or aneurysm formation and the selection of appropriate operative procedures

- human biological phenomena observed by the residents in the operating room
- the hemodynamic effects of general anesthesia that are observed and monitored using appropriate invasive techniques and drug manipulation of the autonomic nervous system
- observation of the biological phenomena of wound healing, the inflammatory process, and vascular hemodynamics

During the postoperative period, residents apply basic science to the care of surgical patients. Evaluation of the patient's volume status involves both clinical observation and correlation of data available through monitoring catheters, along with laboratory data. Support of cardiac function through drug therapy in order to optimize a patient's cardiac status on the Starling Curve is common in the critically ill patient.

Didactic teaching occurs at the weekly Basic Science Course. The goal of this conference is to teach the fundamentals of basic science as applied to clinical surgery.

RADIOLOGY

Acquisition of knowledge in the field of **radiology** occurs through the daily clinical care of patients. The radiologists are readily available to the residents and attending surgeons for consultation. The reading room facility is conducive to teaching residents and students when x-rays of patients under their care are being reviewed. These informal teaching sessions allow the resident to correlate clinical, pathologic, and radiologic findings to develop understanding and knowledge of the patient's disease process. Electronic storage of x-ray images enables the residents to review studies at any computer terminal in the network.

The Department of Radiology has state-of-the-art facilities, including computerized tomographic scanners, magnetic resonance imaging, and a PET scanner. The radiologists attend Matrix conference to discuss pertinent x-ray findings on cases presented at the conference.

PATHOLOGY

The goal for residents is to understand the pathophysiology of surgical disease processes. Objectives include:

- Understanding the pathogenesis of benign and malignant surgical disease
- Understanding the principles of surgical pathology
- Gaining knowledge in the diagnosis and management of human organ pathology

Residents should work with the surgical pathologist evaluating frozen sections, pathologic specimens, and preparation of permanent sections for subsequent reporting in the course of their daily activities. The residents may participate in the performance of autopsies at any time. The resident should read in depth on the pathophysiology of the disease processes that he is reviewing with the clinical pathologist. For all residents, it is important to correlate the pathologic findings on patients for whom they are principally responsible during their day-to-day clinical activities.

Residents are encouraged to attend the various multidisciplinary tumor board conferences held during the week. An in-depth pathology review of the cases being discussed is conducted.

POLICY ON TEACHING FACULTY EXPECTATIONS

EXPECTATIONS OF FACULTY: PER THE ACGME PROGRAM REQUIREMENTS

The faculty must:

- 1 devote sufficient time to the educational program to fulfill their supervisory and teaching responsibilities; and to demonstrate a strong interest in the education of residents,
- 2 administer and maintain an educational environment conducive to educating residents in each of the ACGME competency areas.
- 3 have current certification in the specialty by the American Board of Surgery, or possess qualifications acceptable to the Review Committee.
- 4 possess current medical licensure and appropriate medical staff appointment.
- 5 establish and maintain an environment of inquiry and scholarship with an active research component.
 - a) The faculty must regularly participate in organized clinical discussions, rounds, journal clubs, and conferences.
 - b) Some members of the faculty should also demonstrate scholarship by one or more of the following:
 - (1) peer-reviewed funding;
 - (2) publication of original research or review articles in peer-reviewed journals, or chapters in textbooks;
 - (3) publication or presentation of case reports or clinical series at local, regional, or national professional and scientific society meetings; or,
 - (4) participation in national committees or educational organizations.
 - c) encourage and support residents in scholarly activities.
 - d) collectively document active involvement in scholarly activity.
- 6 In addition, teaching faculty are expected to participate in at least one resident educational activity per year (ie. skills lab, core curriculum, resident case conference, and basic science).

POLICY ON FACULTY EVALUATION

The Program Director is responsible for ensuring the quality of the educational experiences of the training program. Faculty evaluations will be conducted related to teaching and scholarly activity of the faculty members. Faculty evaluations will be formally conducted on an annual basis; however, issues which arise between these annual reviews shall be addressed within a reasonable time period. Trainees will provide confidential evaluations of their supervising faculty members and those providing didactic or other conference offerings. Anonymity and confidentiality are provided to the responder through the use of an electronic evaluation system (New Innovations). The Program Director will present any continued problems to the Surgery Graduate Medical Education Committee. The Department Chairman and the Program Director have the authority to dismiss a faculty member from their teaching responsibilities if they are not meeting their obligation. The Program Director will provide summaries of the Faculty Evaluations to the Departmental Chair/Chief of Surgery for use in his/her faculty evaluation process.

REQUIRED CONFERENCES

Updated: June 2011

Teaching conferences directed to the surgical residents include **Surgical Grand Rounds, Matrix Conference, Basic Science Conference, Journal Club, Ethics Conference and Visiting Professor Case Conference.** Attendance is mandatory for residents on all rotations. Please note that Thursday mornings (7-11 am) will function as our education day. **The residents are freed from all clinical duties (i.e., protected time) to enable them to attend the conferences.** Conference attendance is monitored through the use of a sign-in sheet at each conference. **Attendance at 80% of the conferences is considered mandatory.** For any unexcused absences the first month, the resident receives a memo from the program director. Continued unexcused absences, will result in a formal meeting with the program director and can lead to a resident being placed on probation. The administrative chief resident or the residency coordinator are responsible for collecting the sign-in sheets for resident conferences.

Tuesday Visiting Professor Case Conference (4-5 PM - DOS Conference Room)

Wednesday Grand Rounds (7-8 AM - ECC A and B)

Wednesday Ethics Conference (7-8am-ECC A; first wed of October, January, May)

Wednesday Journal Club (7-8am-ECC A; first wed Sept, Nov-Dec, Feb-April)

Thursday Basic Science (7-8 AM – ECC B)

Thursday Matrix (8-9 AM – ECC –B)

Thursday Skills Lab (9-11 AM – Skills Center)

Basic Science conferences are held weekly from August to June to provide the fundamentals of basic science as applied to clinical surgery. Topics include:

- wound healing
- hemostasis
- management of the acute abdomen
- work-up and management of GI bleed
- hernias
- shock
- trauma
- surgical microbiology and surgical infections
- Endocrine and exocrine pancreatic disease
- thyroid and parathyroid disorders
- gastrointestinal physiology
- esophageal motility disorders
- benign and malignant esophageal neoplasms
- benign and malignant colorectal disease
- metabolic response to injury including burns
- inflammatory bowel disease
- immunobiology and transplantation
- applied surgical anatomy
- surgical pathology.

PGY-4 and 5 residents are the primary instructors. Each session will have a faculty moderator that has expertise in the topic being presented. Residents will be given a quiz at the beginning of each conference. The faculty member will go over the responses to the quiz at the end of the conference. There will be an intense ABSITE review between December and January of each year. A review of missed questions from the previous year's ABSITE exam will also be covered during these sessions.

Visiting Professor Case Conference are held on Tuesday afternoons when we have a visiting speaker for Grand Rounds. The Chief Residents will have the set schedule. Cases are presented by residents and the discussion is led by the visiting professor. All residents are required to be there unless you are post-call.

Surgical Grand Rounds are held weekly between September and June.

Attendance at this conference by residents is mandatory. A variety of topics pertinent to surgeons are presented throughout the year utilizing attending physicians and visiting professors. National and International leaders in Surgery are often invited to give "State of the Art" lectures.

Multidisciplinary Tumor Board conferences are held throughout the week to discuss the management of newly diagnosed and recurrent cancers. Separate conferences are held to discuss the major primary organ sites, e.g., breast, colon/rectum, thoracic, hepatobiliary, and endocrine tumors. Participants in these conferences include general and specialty surgeons, pathologists, radiologists, medical and radiation oncologists, and support personnel. Resident attendance at these conferences is encouraged and is required for residents that are on the specific services that have these site specific conferences.

Residents may be asked to present cases at these conferences.

Journal Club is held the first Wednesday of the month instead of Grand Rounds (alternates with Ethics conference-please see monthly schedule). Interns and residents are assigned articles each session to present to the group on specific topics. An attending is assigned to moderate the session and lead the discussion.

Ethics Conference is held on Wednesday morning (alternating with Journal Club). Faculty from the Bioethics Department will be giving lectures. In addition there will be reading assignments from the American College of Surgeons Bioethics Curriculum.

The Matrix Conference is a major teaching conference for the residents and staff of the Department of Surgery. Resident attendance at this conference is mandatory. Through this conference structure, the goals of maintaining quality assurance and maximum resident education will be met. Please see **Appendix 1** for details on the Matrix conference. PGY-3, 4, and 5's are required to ensure case lists, all complications and interesting cases are turned in weekly.

SKILLS SIMULATION EDUCATION CENTER CEDARS-SINAI DEPARTMENT OF SURGERY

Goals:

- To further the educational and clinical missions of Cedars-Sinai Medical Center by assisting surgeons, residents, medical students, and other members of the surgical team in achieving the requisite knowledge and skills necessary to provide optimal care to surgery patients.
- To create a hands-on educational center to assist individual surgeons, residents, medical students, and other members of the surgical team in achieving their personal and continuous professional development goals.
- To advance surgical education by pursuing innovative research in technology and skills teaching.
- To incorporate the full range of simulation tools to support both cognitive and procedural learning, and to promote interdisciplinary teaching, team training, communication skills and professionalism among surgeons, residents, medical students, and other members of the surgical team
- To conduct “train-the-trainer” courses and workshops.
- To train and educate clinically active surgeons of the community and beyond pertaining to advances in surgical techniques, instruments, and technology.

Objectives:

- To be integrated into the educational objectives of surgical CME, resident and medical student education.
- To teach sterile precautions, techniques and operating room etiquette
- To teach the procedural and cognitive skills necessary to perform common bedside procedures
- To improve cognitive thinking and physical coordination in performing both open and laparoscopic procedures
- To address safety measures pertaining to bedside and operative procedures
- To provide in-service regarding new surgical products and instruments
- To provide an environment of independent skills practice
- To obtain Accreditation from the American College of Surgeons as an Educational Institute
- To develop innovative technologies to improve patient safety and advance the surgical field
- To develop innovative curricula and perform research to advance surgical education

Week	Course	Resident Year
1	Suturing & Knot-Tying (Towfigh) -	1
2	Open Surgical Instruments (Towfigh) -	1
3	Electrosurgical devices (ValleyLab)	1
4	Quiz: Open Surgical Instruments, Surgical Jeopardy (Ethicon) -	1
5	Quiz: Electrosurg devices (Towfigh) Trocars and Gelpert (Anthony from Applied Medical)-	1
6	Staplers, Tackers (Covidien) -	1
7	Advanced Suturing (Sherman) -	1
8	Central Line placement & removal (Ley, Allins, ICU fellows) -	1
9	Ventilator Management (Bukur)	1
10	Airway Management	1
11	Pig lab--Trauma, Thoractomy, Laparotomy (Salim, Margulies) -	4
12	Wound care—VAC (KCI), Wound care RN (Sarah Nedelman) -	2
13	Ultrasound (Karlan) Central Line	2
14	Staplers, Clip Appliers, Harmonic Scalpel (Ethicon)	1
15	Ultrasound: GB, abscess, breast (Karlan)	3
16	Fundamentals of Laparoscopic Surgery (Towfigh, MIS Fellows)	4
17	Pig Lab—Trauma (Salim, Ley) -	5
18	Fundamentals of Laparo+scopic Surgery (Towfigh, MIS Fellows)	3
19	Colorectal—Bowel anastomosis (Murrell) -	3
20	Colorectal—Bowel anastomosis (Fleshner) -	2
21	NO SKILLS LAB—Thanksgiving Holiday	
22	NO SKILLS LAB	
23	Pig Lab--Inguinal Hernia Anatomy and Repair Techniques (Towfigh)	1
24	Simulation: Endoscopy (Soukiasian)	2
25	NO SKILLS LAB—Christmas Holiday	
26	NO SKILLS LAB—New Year's Holiday	
27	Billing, Coding, Faculty vs Private Practice (Karlan, Allins)	2/3
28	Fundamentals of Laparoscopic Surgery (Towfigh, MIS Fellows)	2
29	Pig Lab--Pediatric Surgery (Frykman, Chen) -	3
30	NO SKILLS LAB—ABSITE Week	
31	Simulation: Colonoscopy (Fleshner) –	2
32	Pig Lab--Hernia Repair (Towfigh, Allins)	1
33	Inguinal and Ventral Hernias (Towfigh)	2
34	Pig Lab--Lap band placement, Gastric sleeve, Roux en Y gastric bypass (Cunneen) –	4
35		
36	Fundamentals of Laparoscopic Surgery	4

	(Towfigh, MIS Fellows)	
37	Basic Laparoscopic Skills (Towfigh, MIS Fellows)	1
38	Simulation: Endoscopy (Soukiasian)	2
39	NO SKILLS LAB	
40	Simulation: Colonoscopy (Fleshner)	2
41	Basic Laparoscopic Skills (Towfigh, MIS Fellows)	1
42	NO SKILLS LAB	
43		
44		
45	NO SKILLS LAB	
46		
47		

POLICY ON EDUCATION-RELATED BENEFITS FOR TRAINEES

To support and promote the education of trainees, the Department of Surgery will provide the following items:

- Two (2) sets of the American College of Surgeons SESAP program for use by all residents.
- Two (2) sets of Selected Readings in Surgery for use by all residents.
- \$200 for each resident in general surgery training available for use in their first year of training. These funds are intended for the purchase of books, journals, or review materials.
- \$500 for each resident in general surgery training available for use in either their fourth or chief year of training. The total amount of support cannot exceed \$500 for any individual resident. These funds are intended for the purchase of books, journals, or review materials.
- Surgical loupes for third year categorical residents
- White coats.
- Business cards for Chief residents

Please note that the following expenses incurred by trainees, will not be reimbursed by either the Division of General Surgery or the Department of Surgery (this list is not intended to be all-inclusive):

- personal computers
- stethoscopes, or other medical equipment
- cellular phones
- cellular airtime
- eye protection
- USMLE examination fees
- Medical Board license application fees
- DEA certificate application fees

POLICY ON PROGRAM EVALUATION

The Program Director is responsible for ensuring the quality of the educational experiences of the training program. A yearly evaluation of the program will be conducted related to teaching, scholarly activity, program goals, and the educational environment of the training program. Both faculty and residents will provide confidential evaluations of the program, including didactic or other conferences. Anonymity and confidentiality are provided to the responder through the use of an electronic evaluation system. The Program Director will present any continued problems to the Surgery Graduate Medical Education Committee. The Program Director will provide summaries of the Program Evaluations to the Chairman and Director of Surgical Education. Changes to the program will be based on findings from the yearly evaluations.

ORGANIZATIONAL STRUCTURE OF CLINICAL SERVICES

Resident services are, in most cases, organized in teams comprising a senior level resident and one or two junior residents. Some specialty rotations (neurosurgery) are assigned to one resident.

ATTENDING SURGEON RESPONSIBILITY

Supervisory Surgeons

Attending surgeons are ultimately responsible for all aspects of patient care. They provide direction and supervision of residents, but never relinquish responsibility.

Operating Room Supervision

In accordance with hospital and Department of Surgery by-laws, the attending surgeon **must** be present in the operating suite during surgery. The extent of resident participation in the operative procedure is at the discretion of the attending surgeon with due consideration of the resident's capabilities and the operation being performed.

Extent of Responsibility

The attending surgeon is responsible for all resident activities including supervision of all emergency room admissions and procedures, consultations, emergency and elective admissions and invasive procedures performed by residents.

RESIDENT RESPONSIBILITIES

Clinical Rotation

The resident is expected to participate with the operating room team to assist in safely preparing the patient for surgery and transfer to the recovery room. The resident's primary responsibility is the care of the patient. As part of the educational experience, residents are expected to assist in the placement of appropriate monitoring catheters and invasive lines. Adequate documentation and charting, along with post-operative orders, remain the resident's priority for patient care and resident education. **POST OP NOTES AND POST OP ORDERS MUST BE COMPLETED AT THE END OF THE SURGICAL PROCEDURE (NOT BEFORE THE CASE STARTS)**

Trauma Code Responsibility

The chief resident on call will be responsible to attend **all** Trauma Activations (100 and 200). The only exception should be in the event that the resident is participating in another operative procedure that requires his or her attention. The chief resident is expected to evaluate the patient preoperatively, review x-rays, and confirm the diagnosis before entering the operating room. This policy includes all assigned working nights and weekend call schedules.

36

Senior Resident Participation

The senior resident is responsible for evaluation of all emergency room patients

referred to the surgical service, all consultations, and evaluation of all elective surgery patients for the service. All patients entering the hospital system through any of the above-mentioned avenues are to be seen within one hour by the senior resident, who must report the admission to the attending surgeon within 2 hours of the patient's arrival at the institution. Through this mechanism, patient care will be maintained at a high standard, and the educational opportunity of the senior resident will be fostered through independent evaluation and complete supervision of his/her clinical activities.

Daily teaching rounds will be conducted by the senior resident on the service. During these rounds, he/she will see all patients and consultations assigned to the service. These will be conducted at a time convenient for the attending surgeon and the senior resident.

Updates of patient conditions will be conveyed personally by the senior resident to the attending surgeon on a daily basis.

In the **Operating Room** the senior resident will initiate surgery only with the attending surgeon in the operating suite unless life-threatening circumstances supersede (e.g. ruptured abdominal aortic aneurysm).

Through these mechanisms, adequate supervision and independent graded responsibility will be available to the senior resident.

Junior Resident Participation

The junior resident will participate in all of the above-mentioned activities of the service. He/She will be responsible for reporting all clinical interactions to the senior resident, who is to be kept informed regarding the status of the patients under his/her care.

NIGHTS/WEEKENDS/EMERGENCIES

Attending Surgeon Responsibility

The attending surgeon on call is responsible for night, weekend, and emergency procedures. Emergency procedures include all unscheduled admissions and operations performed.

Senior Resident Responsibility

The senior resident responsible for the service will contact the attending surgeon and present the case to the attending surgeon. Patients admitted during the night, weekend, and emergency coverage, will remain under care of the admitting surgeon and the residents assigned to that surgeon's service.

RESPONSIBILITIES FOR MEDICAL STUDENT EDUCATION

As a surgical resident, one of your responsibilities is education and mentorship of the Year 3 and 4 medical students from the Geffen School of Medicine at UCLA and other medical schools. Your responsibility toward the students increases with seniority, thus the Chief Resident is expected to have a leading role in the experience of the student. This includes maintaining the highest level of professionalism and teaching during rounds, in the operating room, in clinic, and while on-call. In fact, as a Chief Resident, it is highly encouraged that a weekly hour be dedicated to didactic teaching with your student(s).

Year III Medical Students

Third-year medical students rotate 3 weeks at a time in our hospital. During this time, it is expected that they perform as an integral member of your team. This includes following a maximum of 4 ward patients and 1 ICU patient at one time. They are expected to pre-round, write daily progress notes, and be involved in the operating room. In addition, the students are allowed to perform minor procedures (e.g., suturing, knot-tying, central line placement, etc.) when under the direct supervision of a resident or surgeon who is competent in performing the procedure themselves. We encourage the students to follow the patients on whose surgery they scrubbed in. By the end of their rotation, students are expected to have a resident or attending sign off on 3 H&Ps, 3 progress notes, and a short list of procedures. The students will have a printed card for this purpose.

In return, it is expected that the Chief or Senior resident that runs morning rounds use this time to teach the medical student. In addition, teaching in the operating room, whether it be anatomy or physiology, is highly encouraged. When on call, it is expected that the consult resident, not the intern, have the primary role with the medical student. Students on call should be called to all Trauma activations as well as all consultations for surgery. It is the Chief or Senior resident's responsibility to ensure that the student not be relegated to the intern or to performing an excessive amount of scut work.

Students are on call with the Trauma team every 4-6 days. They are given a schedule in advance and are expected to be in-house for their call, with a maximum of 30 hours consecutively in the hospital. Medical student call rooms are located in the basement. Students are assigned one day off per week, but are expected to participate in patient care on weekends if it is not their day off. In addition, the medical students are mandated to attending "Doctoring," which is a full day course at UCLA's campus held every other week on a Tuesday or a Thursday. The students are not to come to the hospital during their Doctoring session. The students are also mandated to attend classes every Wednesday at the UCLA campus, so they are not expected to arrive at our hospital until 11am on Wednesdays.

Student evaluations will be sent to all residents who had contact with the student, except interns. Timely and accurate completion of the evaluations on the ESS website is expected (<http://ess.medstudent.ucla.edu/>).

To know who your student is, how to reach them by pager, what their on call schedule is like, what policies must be followed, and other details, please visit the Cedars-Sinai Department of Surgery website's link to the Medical Student Education Program

(<http://www.csmc.edu/11332.html>). For any questions or concerns related to the medical students, please directly contact Dr. Shirin Towfigh, the Director of Medical Student Education (310-423-8353 or shirin.towfigh@cshs.org).

Year IV Medical Students

Fourth-year medical students rotate 3-4 weeks at a time in our hospital. During this time, they are held to high standards and are expected to function at the level of an intern. This includes following a maximum of 6 inpatients and 3 ICU patients at one time. Their privileges are similar to the Year III medical students, and the residents are expected to teach them daily either during rounds, the operating room, or while on call (see above for details). The Chief resident or Senior resident on the service is responsible for the mentorship of their student, as most of them are considering a career in general surgery.

It is important to note that the rotation experience for the Year IV student is different with each service, as many do not include overnight in-house call, though they are still required to be involved in patient care on the weekends. They are expected to remain on pager, however, in cases of emergencies related to their patients or of educational importance. In addition, the student is expected to follow an education calendar of conferences in order to maximize their experience with us. The details of their service-specific responsibilities and the education calendar can be found on the Department of Surgery website's link to the Medical Student Education Program (<http://www.csmc.edu/11332.html>).

To know who your student is, how to reach them by pager, what their on call schedule is like, what policies must be followed, and other details, please visit the Cedars-Sinai Department of Surgery website's link to the Medical Student Education Program (<http://www.csmc.edu/11332.html>). For any questions or concerns related to the medical students, please directly contact Dr. Shirin Towfigh, the Director of Medical Student Education (310-423-8353 or shirin.towfigh@cshs.org).

PARTICIPATION IN RESEARCH

Scholarly activity by the staff and residents is considered an essential part of the general surgery residency. The residents are required to pursue a research project during the course of their training program. The residents incorporate their projects into their day-to-day activities.

Although a dedicated research year is not mandatory, 3 residents are encouraged to take time off for research each year. Generally one PGY-2 and two PGY-3's are expected to go out each year. Residents who are taking time out for a research year must have a research mentor selected at least 6 months prior to the start of the research year. Dr Nathan Alderson (our Research Administrator) will assist residents in finding research mentors. Any resident interested in research should contact Dr. Alderson at Nathan.Alderson@cshs.org and arrange to meet with him to determine a research plan.

The Department of Surgery will fully fund the research year, however, resident are encouraged to seek their own funding through research grants. For more information regarding funding, contact Kristin Martinez at Kristin.Martinez@cshs.org.

Any resident interested in spending time away for research should notify the Program Director.

A number of our independent surgical laboratories are described below:

Minimally Invasive Surgical Technology Institute (Daniel L. Farkas, PhD--Director)

The Minimally Invasive Surgical Technology Institute (MISTI) is directed by Dr. Daniel L. Farkas, Vice-chairman for Research, Cedars-Sinai Medical Center (CSMC) Department of Surgery. The Institute consists of a scientific research team, a pre-clinical facility and a clinical assessment team, working together on the development and testing of noninvasive technologies and their introduction into everyday surgical practice. The Institute is the focal point for transfer of existing tools and knowledge among specialties, and for collaborative research applying new technologies. Its thematic thrust areas are pursued in five closely linked laboratories (1) Advanced Optics and Robotics; (2) Biophotonics; (3) Wound Healing; (4) Surgical Spectroscopy and (5) Preclinical imaging.

The Cardiothoracic Surgery Laboratory (Kevin Burton, PhD--Director)

The basic research program of the Division of Cardiothoracic Surgery is focused on research into cardiomyopathies and related disorders of the heart and their treatment modalities, including heart transplants, bioprosthetic valves and stem-cell therapies. These problems are approached using modern cell biological and physiological methods such as optical imaging and bioengineering assays of cellular changes related to disease and treatment, including differentiation of cardiac stem and progenitor cells.

The Pediatric Surgery Laboratory (Philip Frykman, MD, PhD-- Director)

The initial focus of the Pediatric Surgery Laboratory is on Hirschsprung's Disease (HD), a genetic disorder causing severe constipation in newborns, affecting one in 5000 live births. Current therapy employs minimally invasive surgery to remove the affected bowel (usually colon) in infancy, re-establishing normal stooling in most children. The most common complication of HD is Hirschsprung-associated enterocolitis (HAEC), a severe infection of the large and small intestine affecting up to 30% of patients with HD, even after corrective surgery to remove the abnormal bowel. The cause of HAEC is unknown; it results in frequent hospital admissions and, in advanced cases, even death. The goal of the lab is to develop an animal model of HAEC after surgical resection to more accurately recapitulate the human disease, study the causative factors of HAEC, and serve as a preclinical model to test novel therapies.

The Ophthalmology Research Laboratories (Alexander V. Ljubimov, PhD--Director)

The Cedars-Sinai Medical Center Ophthalmology Research Laboratories (ORL) consists of two units, the Diabetic Eye Disease Laboratory and the Center for Viral Immunology and Vaccine Development. Directed by Dr. Alexander V. Ljubimov, the Diabetic Eye Disease Laboratory is studying corneal and retinal abnormalities in diabetes mellitus. Ocular diabetes research is focused on elucidating molecular mechanisms of diabetic alterations using the comprehensive approach to ocular changes in diabetes to study both the retina and the cornea. Gene therapy and gene silencing approaches, as well as modulation of vascular stem cells, are used. The Center for Viral Immunology and Vaccine Development, directed by Dr. Homayon Ghiasi, Ph.D., is focused on ocular and systemic immune responses to Herpes virus. The Center's main research goals are to unravel the effects of Herpes virus infection on the body's immune response using methods of immunology and molecular biology; and, determine its role in the development of ocular herpetic disease and nerve demyelination.

The Transplant Immunobiology Research Laboratory (Gordon Wu, PhD--Director)

The Transplant Immunobiology Laboratory (TIL) is the research arm of the Comprehensive Transplant Center at Cedars-Sinai Medical Center, whose mission is to:

- Conduct innovative research in the field of transplant biology and immunology
- Provide transplant professionals with state-of-the-art research facilities, technologies and assistance
- Bring together scientists and clinicians to exchange information and insights to new directions in future transplant research
- Promote multidisciplinary collaborations in our research community

Current studies being conducted include increasing understanding of the pathogenesis of allograft fibrosis, examining the role of Kupffer Cells in the recruitment of extra hepatic progenitors of fibroblasts during the development of hepatic cirrhosis, and exploring cellular and molecular mechanisms governing B cell production of alloantibodies (which can affect acute humoral rejection).

The Islet Cell Transplantation Laboratory (Donald Dafoe, MD and Dodanim Talavera, MD. PhD – Co-Directors)

We are interested in coaxing human embryonic stem cells (HESC) to differentiate into insulin-secreting cells for transplantation and reversal of Type 1 diabetes mellitus. HESC differentiate *in vitro* into pancreatic cell progenitors (dHESC) that express markers such as Pdx1, Foxa2 and Isl1 but no insulin synthesis has been detected. Our molecular biology based research is predicated on the hypothesis – and our encouraging preliminary data - that human endothelial cells (HEC) as well as human pancreatic ductal cells (HPDC) will induce dHESC to become insulin-secreting cells and transplantation of these cells into diabetic severe combined immunodeficient (NOD-SCID) mice will reverse insulin-dependent diabetes.

In addition to our surgical laboratories, our researchers also have access to the Core Support Facilities of CSMC. These include:

- Animal Care and Research Core
- Biostatistics Core
- Confocal Microscopy Core
- DNA Sequencing Core
- Flow Cytometry and Cell Sorter Core
- Microarray Core
- Winnick Family Clinical Research Center (GCRC)

POLICY ON RESIDENT EVALUATION AND PROMOTION

POLICY

- A. The General Surgery Residency Training program ensures the regular evaluation of its physicians-in-training, faculty and program, in accordance with GME Policy #031 “Evaluation of Physicians-in-Training, Program & Faculty”.
- B. Evaluation criteria are established by the Program Director with review/approval by the teaching faculty of the Department of Surgery.
- C. Physicians-in-Training:
 - 1. Physicians-in-Training are to be evaluated by the members of the teaching faculty on each rotation according to the 6 core competencies.
 - 2. Completed and anonymous evaluations are submitted through New Innovations.
 - 3. Results of evaluations are communicated to the physician-in-training, at each semi-annual review with the Program Director. The physician-in-training has the opportunity to review all evaluations.
- D. Faculty:
 - 1. Faculty are evaluated by each physician-in-training at the end of each rotation.
 - 2. Completed and anonymous evaluations are submitted on-line using New Innovations.
 - 3. Results of evaluations are communicated to each faculty member at their bi-annual evaluation meeting. In addition, end of year reports are provided for each teaching faculty member.
- E. Program:
 - 1. The program is evaluated by each physician-in-training and faculty member annually.
 - 2. Anonymous evaluations are submitted through Survey Monkey.
 - 3. Results of evaluations are reviewed by the program director and GME committee for program improvement and/or modification.

EVALUATION

Documentation of the development of independent clinical skills by the residents is accomplished, in part, via the annual American Board of Surgery In-training Examination. This examination measures the technical knowledge and clinical decision-making ability of the residents. It reflects the ability of the program to teach independent and sound surgical judgment. The data from this examination are used to counsel the residents individually and to adjust the program curriculum and conference content in order to strengthen areas of documented weakness.

Progression in the development of the resident’s independent skills is also assessed via the clinical rotation evaluation system. The attending surgeons complete these evaluations at the end of each resident’s clinical rotation. The data are submitted to the Department of Surgery and incorporated into the resident’s personnel file. These clinical evaluation reports assess the

resident's industry, psychomotor skills, technical knowledge, scholarly activities, and interpersonal relationships. The residents are evaluated in relation to the core competencies, as well as objectives specific to the rotation and training level.

At six-month intervals, each resident meets with the Program Director, and progress in developing clinical skills is evaluated at that time. The clinical evaluation reports are reviewed with the resident, and counseling regarding concerns that appear in a recurring pattern is provided. Identified strengths are reinforced. Results of the In-training Examination are reviewed to help the resident address weak areas in his/her fund of knowledge. The resident's scholarly activities and research projects are reviewed during the semi-annual interview, and suggestions are made to help the resident remain productive in this area. The resident is asked to identify areas for improvement within the program as it is developing for him/her. These comments are used by the Program Director to assist in future planning. The resident's long-term goals are discussed to help guide his/her career development. Individual learning plans will be outlined by the resident and the Program Director to address specific areas of concern.

The Surgical Education Committee assesses the development of independent skills through the yearly review of resident progress. This committee is composed of members of the Department of Surgery who actively participate in resident education. On an annual basis, the committee reviews each resident's progress. Problems that are identified are brought to the resident's attention for counseling and correction. A decision is made at this meeting of the committee regarding the appropriateness of each resident to advance to the next level in the training program.

Each resident in this program will be periodically (no less frequently than every six months) evaluated in writing by supervising faculty with regard to the six core competencies listed below.

PURPOSE OF THE EVALUATION SYSTEM

The purpose of the evaluation is to provide information on resident performance for the following reasons:

1. To provide each resident with feedback on his/her performance
2. To identify resident deficiencies and initiate corrective measures to assist the resident in his/her professional development as a surgeon and maintain exemplary patient care that is a hallmark of a teaching hospital
3. To identify strengths and weaknesses in the teaching program which require modification.
4. To make decisions on promotion.
5. To provide data to specific boards for certification.
6. To write letters of recommendation.

METHODOLOGY OF EVALUATION

Residents are evaluated in each of the 6 ACGME core competencies. Multiple methods are issued to assess competence in each area as follows:

I. PATIENT CARE

- A. Simulation lab testing
- B. Daily Service Rounds
- C. Weekly Attending Rounds
- D. Written evaluations
 - 1. by Faculty
 - 2. by Nursing Staff (360° evaluations)
- E. Operating room technique evaluation by Faculty
- F. Annual ABSITE
- G. Review of operative Case Logs

II. MEDICAL KNOWLEDGE

- A. Annual ABSITE
- B. Annual Mock Oral examinations
- C. Attending Rounds
- D. Journal Clubs
- E. Written evaluation by faculty
- F. Matrix Conference
- G. Basic Science Quizzes
- H. Chief Rounds/Trauma Conference
- I. Basic Science Conference Presentations

III. PRACTICE-BASED LEARNING

- A. Matrix Preparation
- B. Attending Rounds
- C. Simulation Lab
- D. Written evaluation by faculty
- E. Conference attendance
- F. Portfolios
- G. Research Projects
- H. Review of Case Logs

IV. PROFESSIONALISM

- A. Written evaluations
 - 1. by Faculty
 - 2. by Nursing Staff (360° evaluations)
- B. Conference attendance
- C. Adherence to policies & procedures of the department of surgery
- D. Ethics conference/course attendance sponsored by GMEC
- E. Direct Observation

V. INTERPERSONAL RELATIONSHIPS & COMMUNICATION

- A. Written evaluations
 - 1. by Faculty

2. by Nursing Staff (360° evaluations)
 - B. Direct observation
 - C. Matrix Presentation
 - D. Chief Rounds/Trauma Conference

VI. SYSTEMS-BASED PRACTICE

- A. Committee attendance with report
- B. Medical record completion
- C. Portfolios
- D. Written evaluation by faculty
- E. Annual ABSITE
- F. Matrix Conference

CLINICAL ROTATION EVALUATION

The rotation evaluation forms are designed to assess the performance of the resident in each of the 6 ACGME core competencies. Including clinical performance, knowledge, technical skills and personal/professional behaviors.

Evaluations are completed for each resident rotation and represent the consensus of service faculty with whom the resident interacted on the clinical rotation. Acceptable and unacceptable levels of performance for each category is determined.

Residents will also have to opportunity to evaluate faculty teaching and clinical rotations. This feedback will be used to improve faculty teaching performance and educational value of clinical rotations.

Evaluations will be available for review by the resident Physician during the office hours of the Residency Program Coordinator.

REQUIRED CONFERENCES

Satisfactory attendance is an indication of the motivation of the resident toward his/her surgical education. Required conferences are Matrix Conference, Core Curriculum, Grand Rounds and Chief Rounds/Trauma Conference. **All residents on clinical services are required to attend a minimum of 75% of required conferences.**

IN-TRAINING EXAMINATION

The In-Training examination is an objective method used to test the cognitive knowledge of the resident. This exam is used in conjunction with the other factors to assess the resident's knowledge and performance. **The resident is required to attain a score at or above the 30th percentile for the nation at his/her level of training.**

MOCK ORAL BOARD EXAMS

Mock Oral board exams are administered to PGY-4 and 5 residents each year. Each resident is tested by two teams of two faculty members and scored by American Board of Surgery criteria. A passing score is required.

MEDICAL RECORDS [\(Cedars Sinai Medical Staff Rules and Regulation: Article IV\)](#)

Resident attention to record keeping is expected. Violation of Cedars Sinai policy regarding medical records can lead to suspension from clinical duties until records are completed.

POLICY AND PROCEDURES [\(Physician In-Training Agreement\)](#)

Policy and procedures of the Department of Surgery and Cedars Sinai Medical Center are to be followed. Specifically, residents are required to follow the vacation and time off request procedures. While on clinical rotations residents are directly responsible to the attending faculty and senior house staff. It is expected that residents will accept guidance and instruction as needed and conform to the unique policies and procedures of each service.

RESIDENT TEACHING

The effectiveness of junior resident and medical student teaching will be evaluated. A willingness to teach and provide direction to students and house staff is expected.

FACULTY MENTOR/ADVISOR

Each resident is assigned a mentor at the beginning of their residency. The designated faculty mentor remains with the same resident for the duration of his/her training, unless the resident is able to find an alternate mentor. Each resident must formally meet with their mentor at least two times per year. At that time the mentor reviews the rotation evaluations to date and discusses any problem areas. A written statement of the resident's performance is submitted by the mentor for the resident's file. The faculty mentor is responsible for presenting an overall assessment of the resident performance at the annual faculty evaluation meeting.

QUATERLY EVALUATION

The department's Graduate Medical Education Committee reviews resident performances. Residents with performance deemed unacceptable by the GME will be issued a warning by the program director that disciplinary action may occur if performance does not improve. Additional ad-hoc behavioral and/or clinical problems brought to the attention of the program director may result in a written formal warning.

ANNUAL EVALUATION MEETING

Annually the Department of Surgery faculty meets to evaluate resident performance. Chief residents also attend the session and their input is given strong emphasis. This session reviews all the factors enumerated above. An opportunity for both positive and negative feedback based on knowledge of the resident by his/her faculty mentor, in-service test score, conference attendance, rotation evaluations, Mock Oral performance, record keeping habits, teaching and conformance to Department policies. Less than satisfactory performance in one or more areas may be grounds for disciplinary action. The comments made are used to draft a statement regarding the progress of the resident. The discussion on each resident is brought to a conclusion by a vote of the faculty. For residents remaining in the program one of the following will be granted:

1. **ADVANCEMENT**
2. **ADVANCEMENT** with stated areas to be improved.
3. **ADVANCEMENT** with **probation** and stated deficiencies that must be improved.
4. **ADVANCEMENT** with **academic probation** and stated deficiencies that must be improved.

5. NO ADVANCEMENT with academic probation and stated deficiencies that must be improved.
6. DISMISSAL with stated justification.

For residents leaving the program one of the following will be granted:

1. Satisfactory completion
2. Unsatisfactory completion

Resident Physician scoring less than the 30th percentile on the annual in-training exam will be placed on academic probation. Residents placed on probation will remain so for a 12 month academic year.

EVALUATION REPORT

After the annual Evaluation Meeting residents are scheduled to meet with the Chairman and/or Program Director or his designee. At that time a performance statement based on the annual faculty meeting will be discussed with the resident. Areas of exceptional performance, areas for improvement and possible solutions to existing problems will be highlighted. This statement will be signed by the resident and the Chairman and/or Program Director and become a permanent part of the resident's file. The Program Director will outline a plan to correct deficiencies. It is the responsibility of the Resident Physician to follow up with any questions that he or she may have regarding an evaluation.

Residents may (but will not necessarily) advance to the next level of post graduate training while on probationary status. Resident who have advanced to their current level of post-graduate training on probationary status will not be advanced to the next level unless the issue(s) leading to probation have been satisfactorily remediated.

Residents are eligible for graduation after satisfactory completion of the PGY-5 (Chief Resident) year. Certification of the resident for admission to the American Board of Surgery examination process ordinarily occurs at graduation but is at the sole discretion of the Chairman and the Program Director.

PROMOTION AND DISMISSAL

All Surgery trainees are subject to promotion and dismissal criteria as indicated in GME Policy #038 "Promotion & Renewal of Physician-in-Training" and GME Policy #035 "Disciplinary Actions and Related Adjudication", in addition to the criteria given in this policy.

Promotion

In order to advance to the next level of responsibility within the training program and/or graduate, the physician-in-training must show Competency in the following:

1. Attainment of surgical technical skills appropriate to the year of training as outlined in the Surgery Residency Goals and Objectives
2. Attainment of appropriate knowledge base as evidenced by performance on clinical rotations, and examinations as appropriate
3. Satisfactory completion of administrative responsibilities
4. Ability to continue learning and function professionally within the specialty of General Surgery.

5. Absence of dysfunction due to substance abuse or emotional causes.
6. Satisfactory achievement of:
 - a. Post-rotation and semi-annual evaluations
 - b. Direct observation by program director and teaching faculty
 - c. American Board of Surgery ABSITE Exam
 - d. Annual Departmental Oral examination

Upon becoming aware of a below satisfactory level of performance, the program director discusses the issues with the physician-in-training and establishes a plan with him/her to foster improvement and a timeline by which improvement must be shown. The physician-in-training's progress is closely monitored until satisfactory performance is achieved. The Program Director may not recommend promotion for a resident if satisfactory performance is not achieved. The resident, may at the Program Director's discretion, be required to repeat all or part of a year of training for failure to make appropriate technical and/or cognitive progress.

Dismissal

A physician-in-training who is unable to rise to a satisfactory level of performance level after remediation efforts within the agreed-upon timeline shall be considered for immediate dismissal or non-reappointment, at the program director's discretion. Dismissal shall be handled according to the Medical Center's process given in GME Policy #038 "Promotion & Renewal of Physician-in-Training" and GME Policy #035 "Disciplinary Actions and Related Adjudication".

GRIEVANCE PROCESS (GME Policy Number GME035)

If a resident is dismissed or placed on probation the resident may exercise the right to appeal. The resident must first appeal to the Program Director and the Chairman of the Department. If the Program Director and the Chairman are in agreement with the recommendation for dismissal or probation, the resident then has the right to the House Staff Discipline Committee. The Discipline Committee is a sub-committee of the Graduate Medical Education Committee of the Medical Center, appointed by the Senior Vice President for Academic Affairs. The decision of this committee is final. Further appeal may be undertaken utilizing CSMC grievance procedures and policies.

POLICY ON RESIDENT ELIGIBILITY

Applicants with one of the following qualifications are eligible for appointment to this residency program:

- A. Graduates of medical schools in the United States and Canada accredited by the Liaison Committee on Medical Education (LCME).
- B. Graduates of colleges of osteopathic medicine in the United States accredited by the American Osteopathic Association (AOA).
- C. Graduates of medical schools outside the United States and Canada who meet one of the following qualifications:
 - 1) Have received a currently valid certificate from the Educational Commission for Foreign Graduates or
 - 2) Have a full and unrestricted license to practice medicine in a U.S. licensing jurisdiction.
- D. Graduates of medical schools outside the United States who have completed a Fifth Pathway program provided by an LCME-accredited medical school.

POLICY ON RESIDENT SELECTION

To ensure that the selection and appointment of Surgery Housestaff is fair and equitable, in accordance with Medical Center standards and ACGME requirements.

All applicants to the Surgery Program are subject to eligibility standards and requirements as indicated in GME Policy #036 "Housestaff Recruitment and Selection."

This program will select among eligible applicants on the basis of their preparedness, ability, aptitude, academic credentials, communication skills, and personal qualities such as motivation and integrity. Consideration in judging these qualities will include but are not limited to:

- Performance on the United States Medical Licensure Examinations
- Letters of recommendation
- Scholastic record
- Honors and awards
- Academic productivity
- Employment history
- Personal interviews

This program will not discriminate with regard to sex, race, age, religion, color, national origin, disability, or veteran status.

This program will, to the extent possible, participate in the National Resident Matching Program (NRMP) for selection of PGY-1 residents.

Applicants are expected to apply via ERAS. Applications submitted directly to the Program Director may be accepted under special circumstances.

All interviewed applicants shall be provided with a written description of the Medical Center's compensation and benefits, in accordance with ACGME institutional requirements.

All formal offers (i.e., letters of intent) and the subsequent contract must originate from the GME Office. No verbal offers may be extended.

POLICY ON RESIDENT DUTY HOURS

Updated: June 2011

It is the policy of the Surgery Residency Program to schedule duty hours and provide on-call schedules and back-up support for Physicians-in-Training in a manner that is in accordance with GME Policy [http://web.csmc.edu/Policies-And-Procedures/Academic%20Affairs/Graduate%20Medical%20Education/Housestaff_Duty_Hours_and_On-Call_Schedule\\$15867.pdf](http://web.csmc.edu/Policies-And-Procedures/Academic%20Affairs/Graduate%20Medical%20Education/Housestaff_Duty_Hours_and_On-Call_Schedule$15867.pdf).

The Department of Surgery requires that the residency training programs foster both quality resident education and facilitate quality patient care. Overall, resident duty hours in all programs must be consistent with the Institutional and specific program Residency Review Committee (RRC) accreditation requirements established by the Accreditation Council for Graduate Medical Education (ACGME). http://www.acgme.org/acWebsite/home/Common_Program_Requirements_07012011.pdf

The structuring of duty hours and on-call schedules focus on the needs of the patient, continuity of care and the educational needs of the residents.

- A. Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities. Duty hours do not include reading and preparation time spent away from the hospital.
- B. Residents must be provided with one day in seven free from all educational and clinical responsibilities, averaged over a four-week period. One day is defined as one continuous 24-h period free from all clinical, educational, and administrative activities.
- C. Duty periods of PGY-1 residents must not exceed 16 hours in duration.
- D. Duty periods of PGY-2 residents and above may be scheduled to a maximum of 24 hours of continuous duty in the hospital.
- E. After 24 hours, PGY-2 residents and above may remain on-site for an additional 4 hours in order to accomplish transitions of care or to attend an educational conference. Residents may not be assigned new patients, participate in outpatient clinics, or perform elective scheduled operations.
- F. Strategic napping, especially after 16 hours of continuous duty and between the hours of 10:00 p.m. and 8:00 a.m., is strongly suggested.
- G. In unusual circumstances, residents, on their own initiative, may remain beyond their scheduled period of duty to continue to provide care to a single patient. **Justifications for such extensions of duty are limited to reasons of required continuity of a severely ill or unstable patient, academic importance of the events transpiring, or humanistic attention to the needs of a patient's family.**
- H. Under those circumstances, the residents must document the reasons remaining to care for the patient in question to the program director. The program director will review each submission and track resident/program episodes of additional duty
- I. R1 residents should have 10 hours, and must have eight hours, free of duty between scheduled duty periods.
- J. R2 residents and above should have 10 hours, and must have eight hours, free of duty between scheduled duty periods. They must have at least 14 hours free of duty after 24 hours of in-house duty.
- K. Residents must not be scheduled for more than six consecutive nights of night float.
- L. PGY-2 residents and above must be scheduled for in-house call no more frequently than every-third-night (when averaged over a four-week period).
- M. Time spent in the hospital by residents on at-home call must count towards the 80-hour maximum weekly hour limit. The frequency of at-home call is not subject to the every-third-night limitation, but must satisfy the requirement for one-day-in-seven free of duty, when averaged over four weeks.

Residents are required to report and log all duty hours in New Innovations. Resident must log in at least once every week. The Program Directors and coordinator will run reports on a weekly basis to review each resident's reported duty hours to ensure compliance and address potential violations.

Duty Hour Noncompliance

In the circumstance where a resident recognizes that he or she will be noncompliant with duty hours, he or she must notify the chief resident, service faculty member, and program director. Accommodation will be arranged immediately to bring the hours back into compliance.

Duty hours are reviewed weekly by the program coordinator and program director. Residents who have not entered duty hour logs will be asked to complete these. Completing duty hour logs is a matter of professionalism and the resident will be judged on this. If a duty hour issue is identified by the program director, the program director will contact the resident in order to understand the circumstances that led to the violation. Corrective action will be arranged with the service in order to bring the resident back into compliance.

RESIDENT FATIGUE/STRESS POLICY

Updated: June 2011

The Department of Surgery supports high quality education and safe and effective patient care. The program is committed to meeting the requirements of patient safety and resident wellbeing. Excessive sleep loss, fatigue and resident stress are serious matters. Appropriate backup support will be provided when patient care responsibilities are especially difficult and prolonged, and if unexpected needs create resident fatigue sufficient to jeopardize patient care during or following on-call periods.

Residents must be able to:

1. To recognize the signs of fatigue and sleep deprivation
2. Implement alertness management and fatigue mitigation process
3. Adopt fatigue mitigation processes to manage the potential negative effects of fatigue on patient care and learning

Definitions:

Faculty: Any individuals who have received a formal assignment to teach resident/fellow physicians.

Fatigue management: Recognition by either a resident or supervisor of a level of resident fatigue that may adversely affect patient safety and enactment of a solution to mitigate the fatigue

Fitness for duty: Mentally and physically able to effectively perform required duties and promote patient safety.

Resident: Any physician in an accredited graduate medical education program, including interns, residents, and fellows.

Scheduled duty periods: Assigned duty within the institution encompassing hours, and may be within the normal work day, beyond the normal work day, or a combination of both

Procedure:

The program will provide all faculty and residents' information and instruction on recognizing the signs of fatigue, sleep deprivation, alertness management, fatigue mitigation process and how to adopt this process to avoid potential negative effects on patient care and learning.

All attendings and residents are instructed to closely observe other residents for any signs of undue stress and/or fatigue. Faculty and other residents are to report such concerns of sleepiness, tardiness, resident absences, inattentiveness, or other indicators of possible fatigue and/or excessive stress to the supervising attending and/or Program Director. The resident will be relieved of his/her duties until the effects of fatigue and/or stress are no longer present.

Sleeping and Taxi Service

Sleeping quarters are provided by the Graduate Medical Education Office for overnight call assignments as well as napping. In addition, the surgery program provides private senior and chief call rooms available on the 7th floor, North Tower. These rooms can also be used for strategic napping and post-call naps.

When a house officer is post-call or at the end of the work day and does not feel safe to drive home, they can request a taxi voucher to get a round trip ride home. Call the Nursing Office at x35180 or go to the Nursing Office, North Tower Plaza Level, Room 2005. Both contacts are available 24 hours a day.

Stress Management

Stress is a normal part of the work-life of a physician. At times, however, house officers may find a need to reach out for help in managing stressful situations or events. The following support services are available for all employees:

Wellness Solutions

<http://web.csmc.edu/csmc-resources/employee-tools/wellness-solutions/>

Wellness Solutions Program

Cedars-Sinai Medical Center

8631 West 3rd Street Suite 740E

Los Angeles, CA 90048

Phone: (310) 423-9660

Fax: (310) 423-9668

Email: wellness.solutions@cshs.org

Work n' Life Matters

<http://web.csmc.edu/csmc-resources/employee-tools/work-n-life-matters/>

East Medical Tower

8631 W. 3rd St, Suite 535E

Los Angeles, CA 90048

T: 310-423-6447 or 1-800-319-8111

F: 310-423-0190

POLICY ENSURING RESIDENTS HAVE ADEQUATE REST

Updated: June 2011

In order to ensure residents have adequate rest between duty periods and after in-house call, the following policies have been adopted:

PGY I:

PGY I residents should be supervised either directly or indirectly with direct supervision immediately available.

Duty periods of PGY I resident **must** not exceed 16 hours in duration.

Minimum Time Off between Scheduled duty periods for PGY I:

Should have 10-hr rest period between duty periods

Must have 8 hours free of duty between schedule duty periods.

PGY II-V:

24 + 4 Rule: Residents cannot stay beyond 28 consecutive hrs.; the 4 additional hrs. are for education or to complete work initiated. If one stays > 28 hrs., the resident **must** report it to the PD who **must** investigate and log the occurrence.

PGY II-III (Intermediate Level Residents): Minimum Time Off Between Scheduled Duty Periods:

Should have 10-hr rest period between duty periods

Must have 8-hr rest period between scheduled duty periods

Must have at least 14-hrs free of duty after 24 hours of in-house duty.

PGY IV-V (Final Years of Education): Minimum Time Off Between Scheduled Duty Periods:

Must be prepared to enter the unsupervised practice of medicine and care for patients over irregular or extended periods.

Desirable: 8 hours free of duty between scheduled duty periods

There **may** be circumstances where these senior resident **must** stay on duty to care for their patients or return to the hospital with fewer than eight hours free of duty. The resident **must** report this to the PD who **must** investigate and log the occurrence.

Residents are responsible for informing their superiors when further hours and call will cause them to be out of compliance. Proactive attention should be paid to work hours and days off. The PGY1 rotations are 28 days. PGY 2-5s should check schedules regularly with the 28-day blocks in mind.

Residents must take personal responsibility for and faculty must model behaviors that promote:

1. Assurance for fitness of duty.
2. Assurance of the safety and welfare of patients entrusted in their care.
3. Management of their time before, during and after clinical assignments.
4. Recognition of impairment (i.e. illness or fatigue) in self and peers.
5. Honest and accurate reporting of duty hours, patient outcomes, and clinical experience data.

Adequate sleep facilities are in place and our resident fatigue and stress policy encourages good sleep hygiene as well as recommending strategic napping and post-call naps.

CONSULTS & BACKUP POLICY

Updated- June 2011

- I. Surgical Consults
 - a. 946 resident is designated as the “consult resident”
 - b. All surgical consult patients must be evaluated within 2 hours from when the call is received
 - i. At the discretion of the 946 resident, the consults are completed in order of acuity rather than order of timing.
 - ii. If the 946 resident is overwhelmed with consults and/or significant delay, the chief resident should assist with consults.
 - iii. Interns should be the last to assist with consults and they should be seeing consults appropriate to their level, i.e. basic I&D for abscess, appendicitis.
 - iv. 946 residents do not scrub cases while there are multiple consults pending**
 - v. The duties of the 946 resident supersede the responsibilities of the service on which the resident is currently rotating.
 - vi. Interns do not carry the consult/code blue pager.
 - vii. The 946 resident is ultimately responsible for the “pink sheet” and dictation, and should oversee and review the completion and dictation of the consult.
- II. Coverage
 - a. Cases
 - i. To be assigned by the 946 resident
 - ii. Lower level cases: Assigned first to the floor intern (**chief should take them through the case**)
 - iii. Upper level cases: Assigned to chief
 - iv. Trauma pagers are never handed off to someone else, each resident/intern keeps their trauma pager with them
 1. Chief scrubs out for all traumas, then can return to OR.
Exception – if scrubbed with trauma attending, is at the discretion of the operating team.
 - b. Vascular/Kidney Transplant
 - i. Chief is home call, called in for cases unless on vacation or day off.
 1. In house chief covers cases in vascular chief absence.
 2. Vascular chief resident is responsible to notify covering chiefs one week prior to date of coverage at minimum or as soon as possible if there is a schedule change.

3. Vascular chief resident should notify chief/senior resident by phone and not email the day prior regarding elective case coverage on weekends when vascular chief resident has day off
4. Consider calling liver fellow for renal transplant case coverage.
5. –Call Back up chief/senior resident on call for case coverage

c. Back Up Coverage

i. Nights/holidays/weekends, if on call team overwhelmed

- 1. Call to chief or fellow to cover that teams cases**
- 2. Call Vascular Chief resident who is on home call**
- 3. If Vascular Chief not available, contact the chief resident on the service to whom the patient is admitted**
- 4. The backup resident/chief is preferentially assigned to the OR.**

III. Transfers to ICU

- a. Contact chief, fellow (if applicable) and attending for the patient, if transferring a patient to ICU (or considering it)
- b. Patient must be seen by senior or chief resident
- c. Resident must accompany the patient to the ICU
 - i. ICU team must receive a signout about the patient, even more so if not in the SICU
 - ii. Assist in the stabilization of the patient including airway, invasive monitoring, line placement and resuscitation– do not leave this up to the medical teams

RESIDENT SIGN-OUT POLICY

Revised: June 2011

Interns:

Sign-out Guidelines

It is expected that the majority of communication from the primary team to on-call staff will be through the Service Team Lists. It is the primary team's job to record any ongoing or pertinent issues with any patient in order to ensure efficient continuity of care.

Afternoon sign-out are required by **6:00 PM** for any patients with recent changes in status or ongoing issues to be managed overnight.

On-going work to do (post-operative checks, lab follow-ups) must be signed-out directly.

Text message sign-out are acceptable for afternoon sign-out's so long as there is confirmation of receipt, otherwise a phone call must be made to confirm receipt.

Any significant events not communicated directly to primary team overnight must be signed-out in the morning with a phone call by **6:00AM** weekdays, 8:00 AM weekends.

Any updates to previously communicated overnight events can be through text message by **6:00AM** weekdays, 8:00 AM weekends.

Junior / Senior/Chief:

When seeing a consult:

The patient should be added to the list with pertinent details. During the day the chief on service should be notified of the patient and plan. At night the on call chief should be made aware of any sick or operative patients. The primary teams should contact the on call resident to discuss any questions about new patients on their list. In most cases the dictated/hand written notes should suffice.

It is the primary team's responsibility to communicate and sign out pertinent information regarding all persons on their service to the on call team.

Notes:

- 1) It is the responsibility of the consulting resident to contact the attending/fellow to discuss the patient.
- 2) New consults for colorectal/minimally invasive/bariatric/thoracic/liver services should be discussed with the on call fellow.
- 3) For nights/weekend. Patients appearing sick or unstable or requiring operative intervention on the vascular service should be discussed with the vascular chief. For stable/non-op patients the vascular chief may be updated in am.

If the receiving resident is in the operating room, then the resident giving sign-out must go to the OR and give a verbal/paper sign-out.

Chief: - Direct sign-out required for all sick in house patients and pending operative cases.

POLICY ON TRANSITIONS OF CARE

Updated: June 2011

OBJECTIVE: To facilitate safe, efficient and effective transitions in patient care. The goal is to prevent errors during transitions of care and to minimize the number of transitions between care providers. In addition, the policies aim to meet all requirements established by the Accreditation Council for Graduate Medical Education (ACGME).

1. All clinical assignments limit transitions of patient care to a maximum of two in a 24 hour period.
2. All sign-outs are conducted in a direct communication between the resident directly responsible for said patients and the resident to cover. Intermediaries are prohibited.
3. All patient sign-outs are conducted in the resident lounge to ensure patient confidentiality and lack of distraction. No transitions are performed in public areas where patient confidentiality may be compromised.
 - a. Hand-offs can be conducted over the phone as long as both parties have access to an electronic or hard copy version of the sign-out sheet. Additionally, all attempts to preserve patient confidentiality are observed.
4. Critical thinking and analysis during the sign-out process is performed with analysis of the sign-out data, discussion of contingency plans and discussion of previous problems and solutions. Ample time is provided to ask and answer all questions.
5. An electronic version of the sign-out sheet is maintained on each services electronic Web/Vs list. This list is kept updated, with input and revision of information at least twice per day. This list is username/password protected and accessible at any on campus terminal. The passwords are changed on a periodic basis with active surveillance to prevent any violations of patient privacy.
6. The use of an electronic or hand copy sign-out sheet are always referred to during the hand over process. They are used to facilitate the transition of care as well as to provide visibility of the sign-out process to senior residents, fellows and attendings.
7. During the first month, all hand-offs are conducted in the presence of a senior level resident (R4/5) to ensure that all sign-outs are thorough with appropriate levels of communication between members of the hand over process.
8. Senior level residents monitor the electronic and hard copy sign-out lists to ensure the accurate transmission of patient information during the daily hand over process.
9. The basic structures of the sign-out lists are periodically audited and can not be changed without the approval of the administrative chief's, senior fellows or program director.
10. Key elements on the checklist are:
 - a. Patient identifiers: name, age, medical record number, and location
 - b. Name of attending physician and upper level residents including their contact information
 - c. Schedule of the Senior resident/attending physician available for back-up

- d. Admission date and admitting diagnosis
 - e. Important elements of history and physical examination
 - f. Relevant social information including contacts, code status, advance directives
 - g. Dates and titles of operative procedures
 - h. Relevant medication list
 - i. Key information on current condition and care plan (diet, activity, planned operations, pending discharge, significant events during the previous shift, changes in medications etc.)
 - j. Specific tasks that need to be accomplished by the receiving resident (e.g. following up on laboratory and imaging studies, wound care clinical monitoring, pending communication with consultants etc)
11. An established pager number is kept for the ward covering (night float) residents. The nursing staff can consistently contact all members of the care staff using these pager numbers. These numbers are provided on all posted call schedules.
12. The current call schedule is available to all services and staff via the surgery website at: <http://web.csmc.edu/clinical/clinical-workstation-and-resources/call-schedules/surgery.aspx>. Additionally, the call schedule is available through the hospital exchange and at all surgical nursing stations.

SUPERVISORY LINES OF RESPONSIBILITY

Updated: June 2011

Supervision. For the purposes of this document, supervision refers to the authority and responsibility that an attending surgeon exercises over the care delivered to a patient by a resident. Such control is exercised by observation, consultation, direction and demonstration, and includes the imparting of knowledge, skills and attitudes by the attending surgeon to the resident. Supervision may be provided in a variety of ways, including person-to-person contact with the resident in the presence of the patient, person-to-person contact in the absence of the patient, and through consultation via the telephone, video linkages, or other electronic means.

Teaching Assistant. Teaching assistant refers to a resident, acting under the appropriate supervision of an attending surgeon, who is providing guidance and/or assistance to a less experienced resident(s) in any clinical activities including the performance of invasive procedures and surgical operations.

GENERAL PRINCIPLES: Within the scope of the training program, all residents, without exception, will function under the supervision of attending surgeons. A responsible attending must be immediately available to the resident in person *or* by telephone and must be able to be physically present within a reasonable period of time, if needed. Each surgical service will publish, and make available, “call schedules” indicating the responsible attendings if needed.

The surgery residency program will be structured to encourage and permit residents to assume increasing levels of responsibility commensurate with their individual progress in experience, skill, knowledge, and judgment throughout the course of their training. All faculty must adhere to current accreditation requirements as set forth by the AGGME for all matters pertaining to the training program including the level of supervision provided. The requirements of the American Board of Surgery, the American Board of Medical Specialties, the Residency Review Committee for Surgery, and the ACGME will be incorporated into training programs to ensure that each successful program graduate will be eligible to sit for an American Board of Surgery examination.

The provisions of this document are applicable to all patient care services, including both inpatient and outpatient care settings, and the performance and interpretation of all diagnostic and therapeutic procedures. The attending and resident surgeons are responsible to assure continuity of care provided to patients.

Residents must, in all circumstances:

1. notify the appropriate attending physician of any critical changes in a patient’s status;
2. notify the appropriate attending physician of any and all patients going to the operating room;
3. notify the appropriate attending physician of any patient seen during evenings, weekends and holidays.

ROLES AND RESPONSIBILITIES: The Department Chair and Program Director are responsible for implementation of and compliance with these requirements. The attending surgeon is responsible for, and must be familiar with, the care provided to the patient as exemplified by the following:

(1) Direct the care of the patient and provide the appropriate level of supervision based on the nature of the patient's condition, the likelihood of major changes in the management plan, the complexity of care, and the experience and judgment of the resident being supervised. Documentation of this supervision will be via progress note, or countersignature thereof, or reflected within, the resident's progress note at a frequency appropriate to the patient's condition. In all cases where the provision of supervision is reflected within the resident's progress note, the note shall include the name of the attending surgeon with whom the case was discussed and the nature of that discussion.

(2) Meet the patient early in the course of care and document, in a progress note, concurrence with the resident's initial diagnoses and treatment plan. At a minimum, the progress note must state such concurrence and be properly signed and dated. If a patient is admitted for non-emergent care, a resident, who is authorized to act as a teaching assistant, may evaluate the patient and discuss the patient's circumstances with an appropriate attending surgeon. This discussion should be documented in the patient record.

(3) Participation in bedside rounds does not require that the attending surgeon see every patient in person each day but does require physical presence of the attending in the facility for sufficient time to provide appropriate supervision to residents. A variety of face-to-face interactions such as chart rounds, x-ray review sessions, pre-op reviews, or informal patient discussions fulfill this requirement.

(4) Assure that all technically complex diagnostic and therapeutic procedures which carry a significant risk to the patient are:

- (a) medically indicated;
- (b) explained to the patient;
- (c) appropriately executed and interpreted; and
- (d) evaluated for appropriateness, effectiveness and required follow-up.

Evidence of this assurance should be documented in the patient's record via a progress note(s), or Countersignature thereof, or reflected within, the resident's progress note(s).

(5) Assure that discharge, or transfer, of the patient from an integrated or affiliated hospital or clinic is appropriate based on the specific circumstances of the patient's diagnoses and treatment.

The patient will be provided appropriate information regarding prescribed therapeutic regimens, including specifics on physical activity, medications, diet, functional status, and follow-up plans. At a minimum, evidence of this assurance will be documented by attending countersignature of the hospital discharge summary or clinic discharge note.

(6) Assure residents are given the opportunity to contribute to discussions in committees where decisions being made may affect their activities. Facilities are encouraged, to the extent practicable, to include resident representation on committees such as Medical Records, Quality Assurance, Utilization Review, Infection Control, Surgical Case Review, and Pharmacy and Therapeutics.

GRADUATED LEVELS OF RESPONSIBILITY:

(1) Residents, as part of their training program, may be given progressive responsibility for the care of the patient. A resident may act as a teaching assistant to less-experienced residents. Assignment of the level of responsibility must be commensurate with their acquisition of knowledge and development of judgment and skill, and consistent with the requirements of the accrediting body.

(2) Based on the attending surgeon's assessment of a resident's knowledge, skill, experience, and judgment, residents may be assigned graduated levels of responsibility to:

- (a) Perform procedures or conduct activities without a supervisor present; and/or
- (b) Act as a teaching assistant to less-experienced residents.

(3) The determination of a resident's ability to accept responsibility for performing procedures or activities without a supervisor present and/or act as a teaching assistant will be based on evidence of the resident's clinical experience, judgment, knowledge and technical skill. Such evidence may be obtained from the affiliated university, evaluations by attending surgeons or the program director, direct observation, and/or other clinical practice information.

(4) Documentation of a resident's assigned level of responsibility will be filed in the resident's record or folder maintained in the office of the director.

(5) When a senior resident is acting as a teaching assistant, the attending surgeon remains available for the quality of care of the patient, providing supervision and meeting medical record documentation requirements as previously defined.

SUPERVISION OF RESIDENTS PERFORMING INVASIVE PROCEDURES OR SURGICAL OPERATIONS:

(1) Diagnostic or therapeutic invasive procedures or surgical operations, with significant risk to patients, require a high level of expertise in their performance and interpretation. Such procedures may be performed only by residents who possess the required knowledge, skill, judgment, and under an appropriate level of supervision by the attending surgeon. Attending surgeons will be responsible for authorizing the performance of such invasive procedures or surgical operations. The name of the attending surgeon performing and/or directing the performance of a procedure should appear on the informed consent form.

(2) During the performance of such procedures or operations, an attending surgeon will provide an appropriate level of supervision. Determination of this level of supervision is generally left to the discretion of the attending surgeon and is a function of the experience and competence of the resident, and of the complexity of the specific case.

(3) Attending surgeons will provide appropriate supervision for the evaluation of patients, the scheduling of cases, the assignment of priority, pre-procedural preparations, and the procedural and post-procedural care of patients.

EMERGENCY SITUATIONS: An “emergency” is defined as a situation where immediate care is necessary to preserve the life of or prevent serious impairment of the health of a patient. In such situations, any resident, assisted by hospital personnel, shall be permitted to do everything possible to save the life of a patient or to save a patient from serious harm. The appropriate attending surgeon will be contacted and apprised of the situation as soon as possible.

POST-GRADUATE (PG) YEAR: After graduation from medical school, post-graduate levels designate the practice level for a physician within his/her designated program.

PG Year-1

The following are examples of activities or procedures appropriate for the PGY-1 year. Supervision is to be determined by the senior resident on service or appropriate attending surgeon.

- Take history and perform physical exam
- Start peripheral IV
- Insert central IV lines
- Insert Foley catheter
- Insert nasogastric tube
- Write orders for routine meds
- Write orders for routine diagnostic tests
- Write post-operative orders
- Assist in operative procedures
- Perform simple surgical procedures
- Insert pulmonary artery catheters
- Tap pleural space
- Tap or lavage peritoneal cavity
- Tap CSF
- Tap joint space
- Ventilator management
- Manage initial resuscitation from shock
- Manage initial resuscitation for burns
- Excision of superficial lesions
- Perform biopsies
- Close lacerations

May not:

- Perform technically complex diagnostic and therapeutic procedures of high medical risk.
- Provide treatments without direct supervision of attending surgeon or senior level resident.
- Be designated as teaching assistant.

PG Year-2

- Perform all of PGY-1 activities/procedures.
- May supervise routine activities of PGY-1.
- Attending surgeon or chief resident will determine which cases are suitable to perform or to act as a teaching assistant.

PG Year-3

- Perform all of PGY-1 and -2 activities/procedures.
- May supervise routine activities of PGY-1 and -2.
- Perform all routine diagnostic and therapeutic procedures performed by surgical sub-specialists.
- Attending surgeon or chief resident will determine which cases are suitable to perform or to act as a teaching assistant.

PG Year-4

- Perform all of PGY-1, -2 and -3 activities/procedures.
- May be assigned as teaching assistant for routine operative procedures.
- Perform technically complex or high risk procedures with attending supervision, at levels previously defined at attending surgeon's discretion.
- Attending surgeon or chief resident will determine which cases are suitable to perform or to act as teaching assistant.

PG Year-5

- Perform all of PGY-1, -2, -3 and -4 activities/procedures.
- Appropriate supervision for technically complex or high risk procedures at attending surgeon discretion.

Senior residents have primary responsibility for the management of each service to which they are assigned, under the supervision of the attending staff. He/she is responsible for the supervision of activities of the house staff members assigned to his/her service and for responding to surgical consultations to his/her service.

EMERGENCIES:

In the spirit of teamwork, any life-threatening emergencies will be handled through available personnel. If the fellow is available, he/she will participate in the care of that patient.

SURGERY MOONLIGHTING POLICY

1. Residents on clinical services (the 5 years of clinical training) may not moonlight. Residents who moonlight during clinical training are preventing themselves from getting adequate sleep and time for self-education given the strict working hours limitations set forth by the ACGME. Residents moonlighting during the clinical portion of the program may not be promoted due to educational deficiencies, or may not have their contracts renewed to complete the program for the same reason.
2. Residents working in the lab may moonlight as long as these conditions are met:
 - a. Written permission from the Program Director is required, as per ACGME rules.
 - b. Moonlighting activities must not interfere with research duties (hours worked, excessive fatigue, etc.).
 - c. Written permission of the research mentor is required
3. All moonlighting activities are governed by appropriate passages in the annual employment contract and ACGME requirements.

Violation of this policy may result in immediate dismissal from the training program.

DEPARTMENT OF SURGERY SUPERVISION POLICY

Updated: June 2011

To ensure that physicians-in-training are appropriately supervised, in accordance with requirements of the Joint Commission for Accreditation of Healthcare Organizations (JCAHO) and the ACGME.

The Department of Surgery is very careful about exposing residents only to levels of decision-making appropriate for their level of experience, and all of the residents function under the supervision of the faculty. We adhere to the GME Policies & Procedures regarding housestaff supervision.

The training of graduate medical trainees physicians is an important mission of Cedars-Sinai Medical Center. Graduate medical trainees must be supervised by teaching staff in such a way that trainees assume progressively increasing responsibility according to their level of education, ability, and experience.

General Guidelines

1. The supervision and communication between the attending surgeon and any resident should exceed that required to ensure that the clinical care delivered meets the established community standard of care.
2. The resident can identify and contact a responsible attending surgeon for a given patient **at all times**.
3. In the event that an attending surgeon is not be available to provide supervision, he or she must designate an alternate or covering attending and identify that person to the resident.
4. For ambulatory or non-urgent care, an attending surgeon is required to be available on-site at the facility during daytime hours of operation.
5. For inpatient admissions, an attending surgeon or supervising resident will be notified of the admission and such notification will be documented in the admitting resident's admission note. An attending surgeon will personally see and evaluate each assigned inpatient admission within twenty-four (24) hours of admission, and co-sign the resident's admitting note or create their own written or printed documentation.
6. For inpatients, residents should maintain ongoing communication **at least one (1) time per day** with the designated attending surgeon. The attending surgeon should document such communication by co-signing the resident's progress note, or the resident will include in his progress note that the case has been discussed with the attending surgeon.
7. It is assumed that there is a **mutual responsibility** on the part of both the resident and attending surgeon to recognize the need for increased frequency and quality of communication, and attending surgeon participation in the following circumstances
 - a. limited experience of the resident
 - b. increased acuity of the patient's condition (e.g. transfer to intensive care unit, need for higher level of clinical care, etc.
 - c. higher risk of complication or mortality associated with the clinical intervention being considered

Lines of Supervision and Communication

Consistent with the philosophy of graded levels of responsibility, it is expected that the resident will directly communicate with, and be, in turn, supervised by the most senior supervising resident on their

assigned surgical team. In turn, it is expected that the most senior supervising resident will directly communicate with the designated attending surgeon. **In urgent, or emergent situations, immediate communication with the attending surgeon by any resident on the team is expected.**

The Program Director shall provide explicit written descriptions of lines of responsibility for the care of patients, which shall be made clear to all members of the teaching teams. In outlining those lines of responsibility, the Program Director will define supervision using the following classification of supervision:

1. **Direct Supervision**: the supervising physician is physically present with the resident and patient;
2. **Indirect Supervision with Direct Supervision Immediately Available**: the supervising physician is physically within the hospital or other site of patient care and is immediately available to provide Direct Supervision;
3. **Indirect Supervision with Direct Supervision Available**: the supervising physician is not physically present within the hospital or other site of patient care but is immediately available by means of telephonic and/or electronic modalities, and is available to provide Direct Supervision;
4. **Oversight**: the supervising physician is available to provide review of procedures/encounters with feedback provided after care is delivered.

Faculty Responsibility for Supervision. The attending surgeon is responsible for the overall management of the individual patient and for supervision of all residents involved in the care of that patient. The attending surgeon will state the specific expectations at the beginning of the rotation, and he/she will establish the chain of command for the care of patients based on knowledge of each resident's ability. Delegation of responsibility is made entirely at the discretion of the attending. Although the attending is expected to support the general principle of graded authority and increasing responsibility, the decision to delegate patient care to a specific resident will be the responsibility of the attending. Likewise, the decision to delegate supervision of a junior resident to a senior resident is the responsibility of the attending.

Supervision of PGY-1 Residents

Indirect supervision is allowed for:

a. Patient Management Competencies:

- evaluation and management of a patient admitted to hospital, including initial history and physical examination, formulation of a plan of therapy, and necessary orders for therapy and tests.
- pre-operative evaluation and management, including history and physical examination, informed consent, formulation of a plan of therapy, and specification of necessary tests
- evaluation and management of post-operative patients, including the conduct of monitoring, and orders for medications, testing, and other treatments
- transfer of patients between hospital units or hospitals
- discharge of patients from the hospital
- interpretation of laboratory results

b. Procedural Competencies

- performance of basic venous access procedures, including establishing peripheral intravenous access
- placement and removal of nasogastric tubes and Foley catheters
- arterial puncture for blood gases

Direct supervision is required until competency is demonstrated for:

Patient Management Competencies

- initial evaluation and management of patients in the urgent or emergent situation, including urgent

- consultations, trauma, and emergency department consultations (ATLS required)
- evaluation and management of post-operative complications, including hypotension, hypertension, oliguria, anuria, cardiac arrhythmias, hypoxemia, change in respiratory rate, change in neurologic status, and compartment syndromes
- evaluation and management of critically-ill patients, either immediately post-operatively or in the intensive care unit, including the conduct of monitoring, and orders for medications, testing, and other treatments
- management of patients in cardiac or respiratory arrest (ACLS required)

b. Procedural Competencies

- carry-out of advanced vascular access procedures, including central venous catheterization, temporary dialysis access, and arterial cannulation
- repair of surgical incisions of the skin and soft tissues
- repair of skin and soft tissue lacerations
- excision of lesions of the skin and subcutaneous tissues
- tube thoracostomy
- paracentesis
- endotracheal intubation
- bedside wound debridement

Lines of Supervision by Service

ACS	MIS/BAR	Colorectal	SICU	THOR
Attending	Attending	Attending	Attending	Attending
R4	MIS Fellow	Colorectal Fellow	SICU Fellow	Thoracic Fellow
R2	R4	R4	R2	R4
R1		R1	R1	R1
AGS A	AGS B	SO/B (A)	SO/B (B)	PEDS
Attending	Attending	Attending	Attending	Attending
R5	R5	R5	Fellow	R3
R3	R3		R2	R1
R1				
VASCULAR	T/HB	OUTPATIENT	UROLOGY	Neuro
Attending	Attending	Attending	Attending	Attending
R5	Fellow	R1	Urology Fellow	R1
R3	R4		R1	
	R1			
NIGHT FLOAT				
Attending				
R4 or R5				
R2 or R3				
R1				

Invasive Procedures and Operations

1. An attending surgeon or supervising resident will be physically present with the patient for all invasive procedures.
2. An attending surgeon or supervising resident will be physically present with the patient for all operations. In the event that an attending surgeon is not physically present for an operation, the supervising resident will ensure that appropriate preoperative documentation of the attending surgeon's notification and approval of the operation was obtained prior to proceeding with the operation.
3. An attending surgeon or supervising resident will see and evaluate each patient prior to the operation and ensure that appropriate documentation of a preoperative note has been performed.
4. An attending surgeon or supervising resident will ensure that an appropriate and adequate informed consent has been obtained and documented in the medical record.
5. An attending surgeon or supervising resident will ensure that appropriate documentation of the procedure has been included in the medical record at the time of the conclusion of the procedure or operation.

Graduated Levels of Responsibility:

(1) Residents, as part of their training program, may be given progressive responsibility for the care of the patient. A resident may act as a teaching assistant to less-experienced residents. Assignment of the level of responsibility must be commensurate with their acquisition of knowledge and development of judgment and skill, and consistent with the requirements of the accrediting body.

(2) Based on the attending surgeon's assessment of a resident's knowledge, skill, experience, and judgment, residents may be assigned graduated levels of responsibility to:

- (a) Perform procedures or conduct activities without a supervisor present; and/or
- (b) Act as a teaching assistant to less-experienced residents.

(3) The determination of a resident's ability to accept responsibility for performing procedures or activities without a supervisor present and/or act as a teaching assistant will be based on evidence of the resident's clinical experience, judgment, knowledge and technical skill. Such evidence may be obtained from the evaluations by attending surgeons or the program director, direct observation, and/or other clinical practice information.

(4) Documentation of a resident's assigned level of responsibility will be filed in the resident's record or folder maintained in the office of the director.

(5) When a senior resident is acting as a teaching assistant, the attending surgeon remains available for the quality of care of the patient, providing supervision and meeting medical record documentation requirements as previously defined.

Backup Support System

Back-up support systems will be provided when patient care responsibilities are usually difficult or prolonged, or if unexpected circumstances create resident fatigue sufficient to jeopardize patient care. Back-up coverage is scheduled so support is readily available in the event that an assigned resident is unable to fulfill the assignment or when additional coverage is needed.

1. Residents are encouraged to call for back-up support when they need help in managing a clinical problem, or the amount of work is impossible to complete in an appropriate period of time.
2. To obtain back-up support, residents follow the departmental chain of command structure (included in handbook) and also notify the administrative chief resident.

Chain of Command

In addition to back-up support mechanisms (see separate program policy on consults/ back-up support), all physicians-in-training shall be informed of the program's "chain of command" for addressing patient care and administrative issues

It is the responsibility of the program director to ensure that a written chain of command (spanning from medical students and junior residents to upper Medical Center administration) is submitted to the appropriate channel (e.g., the GME Office) to provide for accessibility by all Medical Center administrators and patient care staff.

OR SUPERVISION POLICY

OPERATING ROOM SUPERVISION

The attending physician has both an ethical and a legal responsibility for the overall care of the individual patient and for the supervision of the resident involved in the care of that patient. Although they require less direction than junior residents, even the most senior residents must be supervised. A chain of command that emphasizes graded authority and increasing responsibility as experience is gained must be established. Judgments on this delegation of responsibility must be made by the attending surgeon, who is ultimately responsible for a patient's care, based on direct observation and knowledge of each resident's skills and ability.

PURPOSE

To ensure that physicians-in-training are appropriately supervised, in accordance with requirements of the Joint Commission for Accreditation of Healthcare Organizations (JCAHO) and the ACGME.

DEFINITIONS / RESPONSIBILITIES (IF APPLICABLE)

Residents are medical school graduates who have not yet attained board eligibility or certification. Fellows have attained board eligibility or certification and are training in advanced skills (e.g. laparoscopic surgery, surgical oncology, spine surgery). Some fellows have gone through the credentialing process of the Medical Staff and have been granted Medical Staff membership and privileges.

POLICY

Supervision of physicians-in-training (residents and fellows) shall be carried out in accordance with GME Policy #002 "Housestaff Supervision", and any applicable requirements of the program's accrediting agency, if accredited.

Level of Supervision:

1. Physicians-in-Training shall be supervised at all times with an appropriate level of supervision given the individual's level of responsibility, as determined by the supervising physician.
2. For those fellows who have medical staff privileges, the scope of activities permitted without the direct supervision of an attending surgeon is defined by the Medical Staff Constitution and Bylaws, as documented in the hospital database. Fellows may not independently perform procedures for which they are receiving fellowship training, and in that situation, supervision is as per 3 below.
3. Fellows without Medical Staff privileges, and all residents, may not perform operative procedures without the supervision of the attending surgeon. The

attending Surgeon shall be present in the operating room where the case is taking place during the critical portion of the procedure. The Attending Surgeon will be in the hospital and immediately available at all times during the procedure. At the request of any member of the operating team, the attending surgeon will return to the operating room immediately.

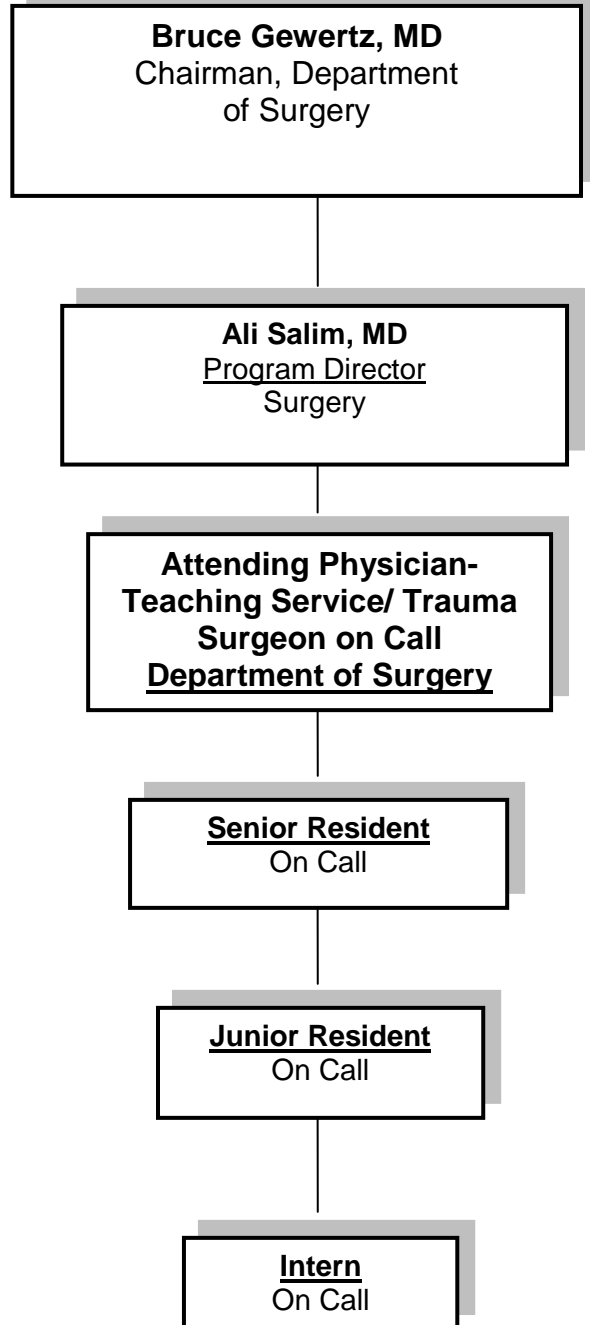
4. The attending surgeon must be present in the operating room suite before the case begins, except in the case of a “life or limb” emergency where the attending surgeon may instruct a resident to begin the surgery in their absence. If a physician in training performs the “time out” procedure, the responsibility for appropriateness of side and site remains with the attending surgeon.
5. The level of involvement by the attending surgeon (e.g. whether or not the attending surgeon is “scrubbed” in) is left to the discretion of the attending surgeon. This determination is a function of the experience and competence of the resident and the complexity of the specific procedure.
6. Issues regarding the level of supervision of residents in the operating room will be brought to the Director of the Surgery Residency Training Program, the Chair of the Department of Surgery, or the Medical Director of the Operating Rooms.

The definition of the critical portion of the procedure is a medical decision to be decided by the attending surgeon. If review is necessary about the appropriateness of the supervision the matter should be referred to the Department of Surgery Performance Improvement Committee.

Attending Coverage for Surgery

ACS Acute Care Service	MIS/BAR	PEDS Pediatric Surgery	CR Colorectal	SICU Surgical Intensive Care
Marko Bukur	Miguel Burch	David Bliss	Liza Capiendo	Marko Bukur
Rex Chung	Scott Cunneen	Steve Chen	Eiman Firoozmand	Rex Chung
Eric Ley	Feizbakhsh Feiz	Phillip Frykman	Phil Fleshner	Eric Ley
Darren Malinoski	Sergey Lyass	Tracy Grikscheit	Beth Moore	Darren Malinoski
Daniel Margulies	Edward Phillips	Kasper Wang	Zuri Murrell	Daniel Margulies
Ali Salim	Shirin Towfigh		Mari Madsen	Ali Salim
			Thomas Sokol	
			Gary Hoffman	
AGS A Advanced General Surgery	AGS B Advanced General Surgery	SO/B (B) Surgical Oncology & Breast	SO/B (A)	THOR Thoracic
Eraj Basseri	Kenneth Adashek	Farin Amersi	Allan Silberman	Clark Fuller
Anton Bilchik	David Fermelia	Alice Chung		Ali Mahtabifard
Brendan Carroll	Neel Joshi	Catherine Dang		Robert McKenna
Moses Fallas	Greg Tsushima	Armando Guiliano		Harmik Soukiasian
Ted Khalili		Scott Karlan		
Humberto Martinez		Babak Larian		
Ricardo Navas		Ed Phillips		
Kai Nishi		Jerold Steiner		
Daniel Schibler				
Matthew Wilson				
VASCULAR	T/HB Transplant/ Hepatobiliary	OUTPATIENT	Urology	
Cohen, J. Louis	Steve Colquhoun	Farin Amersi	Gerhard Fuchs	
David Cossman	Jeff Fair	Cathy Dang	Karen Eilber	
Donald Dafoe	Andrew Klein	Scott Karlan	Hyung Kim	
Bruce Gewertz	Nick Nissen	Ed Phillips	Jennifer Anger	
Rhoda Leichter	Brendan Boland	Jerold Steiner	Andrew Freedman	
Ed Li		Kenneth Adashek	Barry Duel	
Rajeev Rao		Ricardo Navas		
Willis Wagner		David Fermelia		
		Greg Tsushima		
		Shirin Towfigh		

**CHAIN OF COMMAND
DEPARTMENT OF SURGERY
RESIDENCY PROGRAM**



CERTIFICATION OF INVASIVE PROCEDURES

The goal of the certification process is to allow the residents, as they enter the program, to develop safe, cost-effective techniques in performing invasive procedures on patients. This goal is accomplished through a series of lectures and tutorials. The initial clinical experience is monitored and documented by the senior residents and the attending staff.

The invasive procedures that require monitoring and documentation of expertise include:

- subclavian catheter placement
- internal jugular catheter placement
- Swan-Ganz catheter placement
- arterial line insertion
- chest tube insertion

In addition to the above invasive procedures, the following procedures also require monitoring and documentation of expertise:

- endotracheal intubation
- sigmoidoscopy (rigid/flexible)

The resident is required to perform **5** of each of the above-mentioned invasive procedures, under supervision, with documentation. Following this, he/she will be considered to be certified by the Department of Surgery for performance of these invasive procedures. Documentation for each type of procedure will be maintained on an index card on which the patient's initials, medical record number, and procedure date will be recorded. Each procedure must include the signature of the certifying individual. When complete, the cards must be submitted to the residency office where they will be kept in the permanent file for that resident.

Attending surgeons, clinical fellows, or PGY3-PGY5 residents, who have completed certification of a procedure, may serve as supervisors for junior residents. *A resident is not authorized to supervise if he/she has not submitted documentation of his/her certification.*

DOCUMENTATION OF OPERATIVE PROCEDURES

Documentation of operative experience is an essential component of the general surgery residency. Data entry must remain current with no more than a one-month lag period. Residents are required to enter their operative data into the ACGME's Resident Data Collection System which at www.acgme.org.

It is important for residents to recognize that this documentation will be used to demonstrate their experience when applying for board certification and when seeking privileges at hospitals where they will practice. Maintaining an accurate record of operative experience is essential.

The Resident Review Committee for Surgery has stipulated standards for credit roles for surgery residents.

Credit Roles

Only one resident may take credit as surgeon for each operation and only for one procedure in a multi-procedure operation. On same patient/same day/same operation a senior resident may take credit as surgeon while another resident may take credit as a First Assistant, or a senior resident may take credit as a Teaching Assistant while a more junior resident takes credit as a surgeon.

SC *Surgeon Chief Year--only cases credited as surgeon during 12 months of Chief Year*

SJ *Surgeon Junior Years--all cases credited as surgeon prior to Chief Year*

TA *Teaching Assistant-- more senior resident working with junior resident who takes credit as surgeon*

FA *First Assistant--any instance in which a resident assists at an operation with another surgeon, i.e., an attending or more senior resident, responsible for the operation*

Definition of Surgeon

A resident is considered to be the *surgeon* when he or she can document a significant role in the following aspects of management:

- X determination or confirmation of diagnosis, provision of preoperative care
- X selection and accomplishment of the appropriate operative procedure
- X direction of the postoperative care
- X accomplishment of sufficient follow-up to be acquainted with both the course of the disease and the outcome of its treatment

Participation in the operation only, without pre- and postoperative care, is inadequate.

Surgical Critical Care Documentation

Each resident is required to keep a log identifying a list of sample "index" cases of critical care patient management. The Critical Care Index Cases (CCIC) log will document management of a broad scope of critical care patients as follows:

1. Each resident will develop a log of at **least 30** critical care patients who best represent the broad scope of critical care index management.
2. Each of the patients listed on the log must include management of **at least two** of the seven categories listed in item #3.

3. The completed logs should include experience with **at least one** patient in all seven of the following essential categories:
 - a. Ventilatory management
 - b. Bleeding (non-trauma) greater than 3 units necessitating transfusion and monitoring in ICU settings
 - c. Hemodynamic instability
 - d. Organ dysfunction/failure (etiology/mode of management)
 - e. Dysrhythmias
 - f. Invasive line management and monitoring
 - g. Nutrition

Each resident will maintain his/her own log. This data is entered into the operative log software using the code **99292** and selecting the appropriate areas of care. The resident and the program director will sign the completed log; a copy will be retained for review by the ACGME during a site visit.

The American Board of Surgery requires documentation of critical care management at the chief level. No minimum number is specified. The Board looks for critical care documentation in keeping with the operative cases performed as chief. A good rule to follow is that if the patient goes to the ICU for 24 hours following surgery, document both the operation and critical care using the above criteria.

Trauma Cases Documentation

The Defined Category of Trauma includes both operative and non-operative cases. The *minimum* number of cases required is 10 operative cases and 20 non-operative cases. Guidelines for entering the non-operative cases follow.

- The category, major organ trauma, no operation required (MOTNOR), is defined as patients with major organ trauma who were admitted to a specialty care unit in the hospital, i.e., SICU
- The most senior resident on the trauma service should claim credit for the MOTNOR cases. The CPT code is **99199**.
- If the patient subsequently requires a general surgery operative procedure that may be claimed in the defined category, "Trauma, operative," this case should be recorded using an operative code and not as MOTNOR.

Residents who are deficient for one month in documenting their operative experience, critical care and non-operative trauma will receive a warning memo from the Program Director giving them one month from the date of the memo to bring their records into compliance. If the correction is not accomplished by the deadline, the resident will have his/her elective operating room privileges withdrawn until the documentation meets the above-mentioned standard. If the resident remains deficient for the third consecutive month, he/she will be placed on probation for three months, at the end of which time his/her performance will be re-evaluated. Dismissal from the General Surgery Residency Program will be considered if the deficiency persists.

Program Targets

Minimum expectations for operative experience are outlined by the Review Committee for Surgery (RC) of the Accreditation Council for Graduate Medical Education (ACGME). The minimum number of operations that should be performed as surgeon is 750 with at least 150 of these as chief surgeon.

The RC has specified minimum numbers for specific types of surgery, called *Defined Categories*, which are listed below.

Defined Categories	Min.	Defined Categories	Min.
Skin & Soft Tissues and Breast	25	Trauma (Operative)	10
Head and Neck	24	Trauma (Non-operative)	20
Alimentary Tract	72	Thoracic	15
Abdomen	65	Pediatric	20
Liver	4	Plastic	5
Pancreas	3	Basic Laparoscopic Procedures	60
Vascular	44	Endoscopy	85
Endocrine	8	Complex Laparoscopic Procedures	25

ALL RESIDENTS, including preliminary residents, MUST keep track of all operative cases using the web-based ACGME Case Log System. There are no exceptions!

MINIMUM OPERATIVE CASE VOLUME

All residents in the General Surgery Residency Program are required to enter cases in the ACGME Case Log system in a timely manner. Preliminary residents will not be given a positive review if cases are not up to date by the completion of the preliminary year. This means that the Program Director will inform the subsequent Program of the issue and will not sign off on any documentation required by the residency, future employment, or hospital privileges. Residents must complete a minimum number of cases to advance to the next year. A deviation of 20% fewer case than the minimum may lead to disciplinary action or dismissal.

Minimum number of cases per year:

PGY1	60
PGY2	125
PGY3	250
PGY4	200
PGY5	150

DRUG ENFORCEMENT AGENCY (DEA) CERTIFICATION

PURPOSE: To comply with Federal statutes governing the use of DEA certification.

SCOPE: Resident physicians in General Surgery Training Programs.

Trainees are expected to obtain DEA certification as soon as possible, after they have obtained medical licensure in the State of California.

First-year trainees without medical licensure may write and sign outpatient prescriptions only if such prescriptions will be filled within the facility to which they are assigned.

Trainees without DEA certification are forbidden from using the DEA and medical license numbers of other resident physicians to write outpatient prescriptions.

Outpatient prescriptions to be filled outside of the institution should be written by a physician, either attending physician or resident physician who possesses valid DEA and medical license numbers.

Failure to comply with this policy may result in disciplinary action and/or dismissal.

MENTORING

“Mentoring has been an essential component of surgical training as long as the art has existed; without the structure mentorship provides to pass on the knowledge, skills, pitfalls, and traditions of this complex medical specialty, surgery would have stagnated and floundered.”

Mentoring is an extremely important feature of our program. Every resident is assigned a mentor to meet with on a regular basis. The mentor serves as a resource in the department for a wide range of issues. Mentoring assignments are flexible. Remember, mentoring is a two way street. It requires active participation from both parties. Please contact your mentor to set up the first meeting.

The primary goal of these sessions are:

1. Discuss the residents progress by reviewing evaluations, case log, and work hours.
2. Research and/or future goals.
3. Any issues negative or positive that the resident may be experiencing.

2011-2012

Faculty	Resident	Resident
Farin Amersi, MD	Michael Choi (R1)	
Brendan Boland, MD	Doug Liou (R2)	
Miguel Burch, MD	Jason Fuhrman (R1)	
Marko Bukur, MD	Ryan Spurrier (R2)	
Lisa Cassileth, MD	Silvia Kurtovic (Lab)	
Alice Chung, MD	Thuy Tran (R1)	
Steve Colquhoun, MD	Milos Cekic (R1)	
Don Dafoe, MD	Ankur Gupta (Chief)	Michel Dias (R4)
Catherine Dang, MD	Brandice Durkan (Lab)	Lindsey Ross (R1)
Phil Fleshner, MD	Karen Zaghiyan (R4)	Seth Felder (R3)
Scott Karlan, MD	Manabu Fujita (Chief)	Alex Gangi (R3)
Andrew Klein, MD	Tsuyoshi Todo (R4)	Heidi Reich (R2)
Eric Ley, MD	Matt Singer (Lab)	Omar Hussain (R3)
Dan Margulies, MD	Cherisse Berry (R4)	
Darren Malinoski, MD	Galinos Barmparas (R2)	
Beth Moore, MD	Sherry Cavanagh (Chief)	
Harmik Soukiasian, MD	Moshe Barnajian (Chief)	
Shirin Towfigh, MD	Danny Shouhed (Lab)	Daisy Chou (R1)
Willis Wagner, MD	Ryan Luginbuhl (R3)	
Kasper Wang, MD	Scott Short (Lab)	
Hyung Kim, MD Mark Vogel, MD	Ali Afshar (Urol R1)	
Gerhard Fuchs, MD Karyn Eilber, MD	Lauren Wood, MD (Urol R1)	

RESIDENT TRAVEL FOR PROFESSIONAL ACTIVITIES POLICY

The involvement of residents in travel related to educational activities is necessary and encouraged. Because such travel can result in absences from clinical duties and also results in numerous expenses a number of conditions must be met before such travel will be supported.

Conference time must be requested as early as possible for each academic year. Priority will be given based on the date of submission. The only exception to this guideline is for residents who require conference time for the presentation of a paper at a regional or national meeting. The residents presenting a paper will receive first priority. *Residents must submit a conference request at the time an abstract is submitted.*

Residents will be allowed up to \$1500 for papers accepted for oral presentation. Additional time, funding, and poster presentations will be reviewed on a case by cases basis. The time away for conference is 5 days. Conference travel is limited to the continental United States.

Criteria for Approved Travel:

- The reason for traveling is to present the results of original investigative work conducted while at Cedars-Sinai; or for participation in educational activities approved by the Program Director.
- The traveler will be personally making the presentation of the investigative work.
- Time away from clinical duties is minimized. Travel to the away location on the date prior to the day of presentation, and return immediately following completion of the presentation.
-

Authorization for Travel: Absences from clinical Duties must be approved in writing by completing a ***Travel Request Form*** and ***Pre-Travel Expense Itemization Form*** . The request will be submitted in the following order:

- Program Director and Program Coordinator
- Senior resident on service
- Administrative Chief Resident

This action is necessary so that adequate coverage can be arranged for the resident's absence from clinical duties. A travel request form must be completed and signed by the three (3) above-named individuals. The completed travel request form will indicate that coverage has been arranged in anticipation of the resident's absence.

Reimbursement of Travel Expenses: Expenses will not be reimbursed *if the approval for travel was not obtained prior to the date of departure*. Only reasonable and customary expenses will be reimbursed. Allowable expenses include:

- Domestic economy class airfare (includes the United States and Canada)
- Single hotel room
- Usual and customary meeting registration fees
- Meal allowance of \$50 per day

The following expenses will not be allowed:

- Room service charges unless included with meal allowance
- Mini-bar charges
- Bar charges

- Telephone call charges
- Late registration fees
- International air travel

Reimbursement Policy

1. Resident must turn in Travel Request Form, Pre-Trip Itemization, copy of conference brochure (showing dates and location), and Travel Expense Reimbursement Form to the Program Coordinator within two weeks of travel.
2. Original receipts are required (not copies) and must be itemized. Non-itemized receipts will not be reimbursed.

PROFESSIONAL CONDUCT AND ATTIRE

The Department of Surgery expects the highest professional and ethical conduct from the residents in the department. Residents represent the department and the private practices of the attending staff in their daily interactions.

Residents are expected to interact with patients in a courteous manner, displaying empathy, compassion and respect. They are also expected to interact with the nursing and ancillary staff in a professional manner, showing mutual respect and cooperation.

Proper attire, including a shirt and necktie for men and appropriate similar dress for women should be worn at all times. The Department of Surgery does not approve of tee shirts, jeans, or sneakers being worn to conferences or on the floors even during call at night or on weekends. Wearing scrub clothes out of the Operating Suite is strongly discouraged. Residents are responsible for keeping their lab coats clean and repaired.

Additional requirements, in accordance with hospital administrative policy are as follows (HRM00063):

- All personnel are required to wear photo identification. The identification tag is to be worn with the picture visible.
- All clothing must be consistent with the community standard for health care, and not attract undue attention or serve as a distraction to others. It must also be appropriate to the type of work being performed and take into account the expectations of the customer served.
- Jewelry and other accessories shall be minimized. No more than two earrings per ear shall be worn. Body piercing anywhere other than the ear shall not be displayed.
- Sweat bands are not permitted.
- Management reserves the right to request an employee to cover tattoos or any other body art that may be offensive to some patients.
- Socks or stockings are required by all personnel involved in direct patient care and interactions.
- Scrub attire will be provided by Linen Services on a routine basis.
- Personnel will don scrub attire on arrival and remove prior to leaving work.
- Scrub attire is not permitted off the hospital property for any reason.
- Excellent grooming standards are to be maintained at all times while on duty.

OUTPATIENT AND PRIVATE OFFICE ATTENDANCE REQUIREMENT

Our goal is to obtain a satisfactory outpatient educational experience for all general surgery residents. This will allow the resident to obtain continuity of care in the preoperative, operative, and postoperative management of surgical patients.

All residents are required to attend office hours the equivalent of 1/2 day per week. No exceptions. Residents on the Acute Care Service and the Advanced General Surgery Service will attend the Thursday morning Ambulatory Care Clinic (ACC) Residents on other services will attend the clinic and office hours of the respective service. Residents are required to submit to the Department of Surgery a record of the patients seen during each office session, along with the date of the session and the attending surgeon. A copy of the session's appointment list may be used for this documentation. Patient names should be covered to ensure compliance with HIPAA regulations. *Each office session should include contact with at least five patients.*

LEAVING THE HOSPITAL WHILE ON CALL

1. Any resident on-call for the SICU may not leave the building at all while “on-call”. Residents assigned to the ICU’s who need to leave during a regular day (not on-call) must check with the ICU fellow or attending before leaving.
2. The 946 pager and the associated code pager may NEVER leave the building. Thus, if the 946 resident leaves the building, the pagers must be handed off first to another resident at an appropriate level.
3. All other residents who need to leave the building (during a regular day or while on call) must check with a senior person before doing so (their own chief during regular work-hours or the chief on-call during on-call assignments).

If there is a major catastrophe requiring you to leave (even if you are in the ICU) then you must contact the chief resident on-call that day, or the in-house attending, and hand off your pagers before you leave. Please be sure that I am notified of this by email or phone call.

Failure to abide by these simple points will be considered gross dereliction of duty and will lead to immediate termination. This policy is necessary to protect the safety of patients under your care while you work here.

FIRE TRAINING

This is a CSMC requirement. This training takes a few minutes on the web, and refers to the prevention and treatment of fires in procedure areas such as the Operating Room.

Please use this web link:

[<http://www.csmc.edu/6666.html>](http://www.csmc.edu/6666.html)

POLICY ON Email

You are expected to read your email at least every 24 hours.

MATRIX CONFERENCE

**A Surgical Resident's Guide
to the
Matrix Program
at the
Cedars-Sinai Medical Center**

The Department of Surgery Patient Safety Curriculum

**Leo A. Gordon, MD, FACS
Associate Director of Surgical Education
Cedars-Sinai Medical Center
Los Angeles, California**

1. What is a Morbidity and Mortality Conference?

The Surgical Morbidity and Mortality Conference is the "golden hour" of surgical education.

Just as surgeons use their technical surgical skills to deal with surgical pathology, so must the resident and surgical staff use their intellectual skills to fight off the injurious forces of surgical ignorance that lead to surgical complications.

The forum for that battle is the weekly Surgical Morbidity and Mortality Conference.

The spirit of this conference is the spirit of intellect, competition and medical debate. It is the last bastion of such open debate in medicine today.

This conference is the ultimate medical democracy.

During this conference, residents are on the same level as every surgeon in the room because of a common goal - the identification and assessment of surgical complications and the effort to learn from such complications.

This conference is the most important hour of the
surgical educational week.

Just as there is an art and science to surgery, so is there an art and science to preparing, coordinating and presenting at the Surgical Morbidity and Mortality Conference.

Over the course of your surgical education, those skills will be developed and refined.

At the Surgical Morbidity and Mortality Conference residents present a case summary, accompanied by a printed protocol. Diagnostic studies are reviewed. The detection, evolution and treatment of the complication are discussed by the members of the department of surgery. The presenting resident then answers questions about the indications for surgery, the technical aspects of the surgery, the presentation and diagnosis of the complication as well as the outcome.

Specific error and complication-reducing surgical points are reviewed by the presenting resident. The surgical issue is put into the context of the surgical literature and wider surgical practice.

At the end of the discussion the complication is categorized into one of several areas:

1. Error in Judgment

There was an error in the surgical thought process or analysis of the case.

2. Error in Technique

There was an error in the technical performance of the case.

3. Error in Medical System

There was an error in the method of transmission of data, organization of the service or chain of command within the organization of the service

4. Nature of Disease

The complication arose from the underlying disease.

The spirit of the Surgical Morbidity and Mortality Conference is the spirit of ongoing education. There is no conference of greater value to a resident than a well-run, well-moderated and well-attended Surgical Morbidity and Mortality Conference. If used and viewed properly, it will become an integral part of your surgical education.

2. How does a Matrix Conference differ from the traditional Surgical Morbidity and Mortality Conference?

The traditional Surgical Morbidity and Mortality Conference has a lethal congenital defect. That defect is that despite the clear and well-prepared resident presentations, the lively discussions, the debates and the controversies, *all the great lessons put forth die at the door.*

It is illogical to have the department of surgery congregate, discuss, analyze and review an essential surgical topic or principle and to have no ongoing department-wide educational benefit come of it.

There has never been a method for codifying, memorializing and sustaining the great surgical lessons of the traditional Surgical Morbidity and Mortality Conference.

The Matrix program in the Department of Surgery at the Cedars-Sinai Medical Center corrects that defect by constructing a year-long complication-oriented curriculum based on the points and discussions at the conference. Each conference generates a curriculum based on the points expressed during the presentation, discussion and categorization of the complication. The lessons learned during the conference are sustained after the conference. Those lessons become educational threads developed throughout the academic year.

3. What is the educational theory behind the Matrix program?

Surgeons learn more from an analysis of their errors than they do from an analysis of their successes. Surgery is the most individual-oriented medical specialty. When the dust settles, there is really only one identifiable entity in the mix of a surgical case - the surgeon who cared for the patient. For that reason, surgical complications plough a deeper cortical furrow than any complication in any other field of medicine.

If surgeons are exposed to surgical complications early in their career *in an educationally meaningful manner*, they will be less likely to engender that complication as their careers progress.

Furthermore, if surgeons are confronted with a complication, because of the Matrix approach, they will be more likely to identify the complication earlier and to treat it more effectively.

The Matrix program finds its roots in Problem Based Learning. In this approach to education, students are exposed to areas of study *well in advance of preparatory materials*. Such an approach to surgical education sensitizes the resident to errors and complications early in their careers. This orientation to surgery gives rise to a pattern of surgical thought that is complication-oriented.

Because of the ongoing analysis, recognition and review of surgical errors and complications, a Matrix-educated surgical resident will be less likely to commit such errors or to engender such complications.

4. What is an M+M Matrix?

An M+M Matrix is a detailed outline of the surgical aspects of a specific complication. This outline creates a framework (a matrix) for further study and discussion about that complication. Each complication discussed generates its own specific matrix - post-operative respiratory distress, post-operative stomal bleeding, exigent bleeding during pancreatic resection, anastomotic leak following anterior resection, etc.

The M+M Matrix is formulated each week by the Moderator of the Matrix Conference. The Matrix is then distributed to the resident and to the attending staff. The weekly Matrix forms the basis for discussions on rounds, in the clinic or in the operating room.

5. What is my role in the Matrix Program?

The Matrix Program seeks to develop organization and presentation skills - skills you will need throughout your career. This development begins in Year I.

Participation in the program is through a process of Vertical House staff Matrix Integration. Each resident level receives an assignment for the upcoming conference. These assignments are based on the complications to be discussed at that conference. The assignments are typically distributed several days before the conference.

Year I is responsible for the M+M Matrix Surgical Pathology Sheet in which common surgical diseases of the specific organ-system complication to be presented are listed.

Year II is responsible for the M+M Matrix Complication Bullet Sheet. This document lists the surgical complications of the operation under discussion at the conference.

Year III is responsible for the M+M Matrix Complication Reference Sheet. This is a compendium of recent references from the surgical literature appropriate to the case being discussed.

Year IV and V are responsible for submitting cases for presentation. There is a set protocol for these submissions. All complications are submitted to the moderator on Friday. In the absence of complications, the resident will submit problem cases that may be on the service. These cases might be diagnostic dilemmas or complications transferred in after procedures performed at other facilities.

In the absence of complications or problem cases, the resident may then submit a case of particular interest. Such cases might include extraordinary surgical procedures or cases in which there has been an unusual diagnosis.

If any questions arise regarding these assignments, please contact the Moderator.

6. How does the Matrix Program fit into the overall educational program within the Department of Surgery?

Many conferences, rounds, seminars and meetings make up the overall educational program within the Department of Surgery. Each of these adds to your overall surgical education. The Matrix Conference is one of the few participatory conferences attended by both staff and resident. For that reason it is unique. The Matrix Conference is the hub of the educational program.

The Matrix Program has a special educational dynamic that is of great value to you and to your surgical education. The lessons learned at the Matrix conference enhance the lessons learned at other conferences.

7. What is the format for the Matrix Conference?

In order to discuss a case in a methodical and educationally valuable manner, the Matrix conference has a set format:

Format for the M+M Matrix Conference

1. The complication is stated and classified.
2. The case is presented:
 - a. A narrative of the case
 - b. A review of studies pertinent to the case
 - c. A review of the surgical procedure
 - d. The chronology of the complication
 - e. A discussion of the treatment of the complication
3. Questions about the case and the complication are solicited from the audience.
4. The case is discussed by the presenting resident in the context of the surgical literature.
5. The responsible attending surgeon may comment on the case.

8. How do residents prepare for a Matrix presentation?

The Presenting Resident's M+M Matrix Checklist

1. Data retrieved
2. Summary prepared and typed; e-mailed to moderator audiovisuals prepared
3. Films retrieved, copied and reviewed with radiologist,
4. Attending surgeon notified that complication is to be presented
5. List of potential questions drawn up and discussed with the Moderator
6. Category of complication assigned
7. Radiologist and pathologist notified that case is to be presented
8. Literature reviewed; case put in context of surgical literature; presentation outlined
9. Packet of pertinent papers filed in service complication notebook
10. Clean lab coat retrieved from the laundry

9. What happens if I have questions about a point of discussion or surgical principle after the conference?

Continuity is a central theme of the Matrix program. Many questions regarding the evolution of a case, the effect of a complication, or the manner in which a complication was diagnosed and treated may arise after the conference.

There are many ways to answer these questions. You should always discuss the issue with your chief resident. You may discuss the issue with the responsible attending surgeon. You may contact the Moderator of the Matrix Conference for further discussion.

The Matrix Conference is the *beginning* of your surgical education regarding the specific issues raised. The conference and the discussions arising from it begin a week of discussion, debate and education.

It is the responsibility of the chief surgical residents and the attending teaching staff to participate in those discussions and to answer any questions you may have. Never hesitate to ask a question at the conference.

Never hesitate to contact the chief resident or the attending surgeon should a question arise.

Many questions are forwarded to the Moderator via e-mail. E-mail is a valuable vehicle for answering these questions and for extending the discussions beyond the confines of a one hour conference

Feel free to e-mail any of the attending teaching staff with any unresolved questions.

It is suggested that prior to doing this, the resident visit the medical library.

10. What role do the quarterly Matrix Examinations play in resident evaluations and promotion?

Written Matrix examinations are administered quarterly. The Matrix examinations are multiple choice or short-essay examinations based exclusively on points made and issues raised at the weekly Matrix conference. A review of these examinations is one way to gauge the value of the Matrix program. They serve as a personal guide to the individual value of the conference.

The results of the quarterly examinations are confidential. They are discussed individually with each resident throughout the academic year. The cumulative scores are reported to the department of surgery. As of this writing, these scores play little role in current evaluation or promotion policies.

It is strongly suggested that after the examinations are graded you make an appointment with the Moderator to discuss the results. There is usually a post-examination review conference to discuss the examination questions.

Patient safety is a high priority for resident and staff physicians throughout the country. The best way to view the Matrix Program is to view it as a weekly seminar in patient safety. Just as with a post-graduate seminar at a university, the Matrix Program requires preparation, participation and examination. If you get fully involved with the Matrix Program and make it part of your ongoing educational life you will become that articulate intelligent surgeon we all hope we see when we gaze up from that ER stretcher.

Good luck!

=====

Appendix 2

**Department of Surgery
Semi-Annual
Mentoring Meeting Record**

Resident Name _____
Mentor/Advisor _____
Date _____

Meeting Number for the 2011-2012 Academic Year

1 2

Please check all that apply:

- Reviewed Rotation Evaluations
- Reviewed Resident's Case Logs
- Review preparation for results of In-Service Training Exam
- Discussed the issues of Sleep Loss, Fatigue and Stress
- Reviewed issues outside of work environment

Assessment and Conclusions:

- This resident does **NOT** have any significant issues related to sleep loss, fatigue or stress
- The following issues were reviewed _____

- The following actions were taken _____

- Next meeting Scheduled for: _____

Comments: _____

**Please return to: Rebecca Bernstein
Academic Program Coordinator
Department of Surgery, 8215 NT
Phone (310) 423-6637 FAX: (310) 423-7503**



CEDARS-SINAI MEDICAL CENTER.
CSMC Department of Surgery
Resident Time-Off Authorization

Name: _____

1. Reason for Requesting Time Off:

- Presentation: I am the PRESENTING author
- Educational Trip _____
- Chief Trip
- Personal time off/Vacation starting: _____
Return date: _____

2. Dates Away from the Medical Center: _____

- My last day at work is (day, date): _____

3. I will travel to the meeting by **(not applicable if taking vacation)**

- Car
- Plane: Please attach a copy of your preferred flights.
- Other: _____

My presentation is on (Day, Date): _____

The meeting begins on (Day, Date): _____

The meeting Ends on (Day, Date): _____

I will return to work on (Day, Date): _____

4. Name of Resident Covering during your absence.

5. Approved: _____

Ali Salim, Program Director

**IF YOU ARE PRESENTING PLEASE ATTACH A COPY OF THE
MEETING SCHEDULE**

Appendix 4

<p style="text-align: center;">CEDARS-SINAI MEDICAL CENTER</p> <p style="text-align: center;">Department of Surgery</p> <p style="text-align: center;">Pre-Trip Expense Itemization</p>							
INSTRUCTIONS							
The Department of Surgery requires each travel request for approval to be accompanied by an itemization of anticipated travel expenses.							
NAME OF PERSON TRAVELING							
DATE AND LOCATION(S) OF TRIP							
PURPOSE OF TRIP							
DEPARTMENT		DEPARTMENT ACCT. NO		CONTACT PERSON:		Ext:	
							Estimated Cost
Travel Fare	Air	Rail	Bus				
Lodging							
Private Automobile:	Total Miles		Rate/Mile		Insert current rate		0.00
Other Ground Transportation					in shaded box		
Parking							
Hotel							
Meals							
Registration Fees							
Phones and/or Wires							
Supplies							
Other							
				Total Anticipated Expenses			0.00

Team:

Fellow:
Resident:
Intern:

Pager:
Pager:
Pager:

Contact #:
Contact #:

DEMOGRAPHICS	SITUATION	PERTINENT HISTORY	ASSESSMENT	RECS/TO DO LIST
--------------	-----------	-------------------	------------	-----------------

NAME: UNIT: MRN: ATTN:	CC: SURG:	HIS: MEDS: ALL: CODE:	ACTIVE ISSUES:	RECS: TO DO:
NAME: UNIT: MRN: ATTN:	CC: SURG:	HIS: MEDS: ALL: CODE:	ACTIVE ISSUES:	RECS: TO DO:
NAME: UNIT: MRN: ATTN:	CC: SURG:	HIS: MEDS: ALL: CODE:	ACTIVE ISSUES:	RECS: TO DO:
NAME: UNIT: MRN: ATTN:	CC: SURG:	HIS: MEDS: ALL: CODE:	ACTIVE ISSUES:	RECS: TO DO:
NAME: UNIT: MRN: ATTN:	CC: SURG:	HIS: MEDS: ALL: CODE:	ACTIVE ISSUES:	RECS: TO DO:
NAME: UNIT: MRN: ATTN:	CC: SURG:	HIS: MEDS: ALL: CODE:	ACTIVE ISSUES:	RECS: TO DO:



CEDARS SINAI MEDICAL CENTER

Residency/Program Name:	Cedars Sinai Medical Center, Department of Surgery			The following grid conforms to ACGME CPR VI.1-2. Attending physician will retain ultimate responsibility for all patient care.			
Residency/Program Director:	Ali Salim, MD						
Grid Completed by:	Ali Salim, MD			Authorized to Supervise			
Effective Date:	June 2011						
Definition/Classification of Supervision Levels:	1.	Direct Supervision – the supervising physician is physically present with the resident and patient. C.P.R. VI.D.3.(a)		A – Attending			
	2.a.	Indirect Supervision – with direct supervision immediately available - Supervising physician <u>is</u> within hospital or other site of patient care, and is immediately available to provide Direct Supervision. C.P.R. VI.D.3.(b).(2).		SR – Senior Resident/Fellow (as defined by RRC)			
	2.b.	Indirect Supervision – with direct supervision available – supervising physician <u>is not</u> physically present within the hospital or other site of patient care, but is immediately available by means of telephonic and/or electronic modalities, and is available to provide Direct Supervision. C.P.R. VI.D.3.(b).(2)		IR – Intermediate Resident/Fellow (as defined by RRC)			
	3.	Oversight – The supervising physician is available to provide review of procedures/encounters with feedback provided after care is delivered.C.P.R.VI.D.3.(c)		Other – as defined by RRC (could include LNP, LM, PA, and CRNA etc.)			
RESIDENT POST GRADUATE YEAR	CLINICAL ACTIVITY			LEVEL OF SUPERVISION AND SUPERVISOR			
				1	2.a	2.b	3
1	Admission				A		
1	H&P				A		
1	Abdominal paracentesis			IR for first 5	A		
1	Arterial Catheter				A		
1	Arterial puncture				A		
1	Phlebotomy				A		
1	Breast exam				A		



CEDARS-SINAI MEDICAL CENTER

1	Central venous catheter	IR for first 5	A		
1	Develop and document initial plan of care		A		
1	Develop differential diagnosis and problem list		A		
1	Dictate discharge summary		A		
1	Digital rectal exam		A		
1	Evaluate new and follow-up patients in outpatient setting		A		
1	Evaluate patients with acute medical problems upon request of nurses or LIPs		A		
1	Flexible sigmoidoscopy	IR for first 5	A		
1	Initiate/adjust mechanical ventilation		A		
1	Initiate discharge planning		A		
1	Insert Chest tube	IR for first 5	A		
1	Insert pulmonary artery catheter	IR for first 5	A		
1	Insert Urethral catheter		A		
1	Modify daily plan of care		A		



CEDARS-SINAI MEDICAL CENTER

1	Nasogastric intubation		A		
1	Obtain informed consent for procedures		A		
1	Oral endotracheal intubation	IR for first 5	A		
1	Order Restraints		A		
1	Order consults for diagnostic studies, evaluation by other services, therapies, specialized care , or social services		A		
1	Order/adjust artificial feeding modalities		A		
1	Order/interpret routine diagnostic studies		A		
1	Pelvis exam, pap smear, wet mount		A		
1	Perform ACLS	IR for first 5	A		
1	Perform ATLS	IR for first 5	A		
1	Perform and document history & physical		A		
1	Thoracentesis	IR for first 5	A		
1	Write daily progress notes		A		



CEDARS-SINAI MEDICAL CENTER

1	Write orders for routine diagnostic studies, medications and other care modalities		A		
1	Abscess drainage		A		
1	Repair laceration	IR for first 5	A		
1	Excision benign lesion	A			
1	Excision malignant lesion	A			
1	Excisional breast biopsy	A			
1	Breast lumpectomy/quadrantectomy	A			
1	Skin graft/flap	A			
1	Tracheostomy	A			
1	Thyroglossal duct cystectomy	A			
1	Appendectomy	A			
1	Hemorrhoidectomy	A			
1	Anal fistulectomy/fistulotomy	A			
1	Lateral internal sphincterotomy	A			



CEDARS-SINAI MEDICAL CENTER

1	Excision of perianal lesion	A			
1	Exploratory laparoscopy	A			
1	Diagnostic laparoscopy	A			
1	Cholecystectomy	A			
1	Cholecystotomy	A			
1	Herniorrhaphy	A			
1	Ureteral repair	A			
1	Thoracotomy	A			
1	Sternotomy	A			
1	Rib excision	A			
1	Decortication	A			
1	Pleurodesis	A			
1	Pleural biopsy	A			
1	Lung biopsy	A			



CEDARS-SINAI MEDICAL CENTER

1	Closure of chest wall defect	A			
1	Excision of mediastinal lymph nodes	A			
1	Diagnostic peritoneal lavage	IR for first 5	A		
1	Trauma Ultrasonography		A		
1	Wound exploration		A		
1	Decompression fasciotomy	IR for first 5	A		
1	Treatment of dislocation	IR for first 5	A		
2	Mastectomy (modified radical/radical)	A			
2	Mastectomy (total/simple)	A			
2	Vascular access procedure	SR	A		
2	Upper gastrointestinal endoscopy	SR	A		
2	Lower gastrointestinal endoscopy	SR	A		
2	Gastrostomy (percutaneous/open)	SR	A		
2	Repair gastric/duodenal perforation	SR	A		



CEDARS-SINAI MEDICAL CENTER

2	Repair small bowel perforation	SR	A		
2	Gastroenteric anastomosis	SR	A		
2	Enterolysis	SR	A		
2	Enterectomy	SR	A		
2	Enteroenterostomy anastomosis	SR	A		
2	Enterotomy	SR	A		
2	Colectomy	SR	A		
2	Colostomy	SR	A		
2	Enterostomy Closure	SR	A		
2	Biopsy of liver/wedge	SR	A		
2	Drainage of abdominal abscess	SR	A		
2	Arteriovenous fistula	SR	A		
2	Bronchoscopy	IR	A		
2	Cystorrhaphy/bladder repair	SR	A		



CEDARS-SINAI MEDICAL CENTER

3	Lymph node dissection	SR	A		
3	Breast reconstruction	SR	A		
3	Mammoplasty	SR	A		
3	Cervical exploration for trauma	SR	A		
3	Carotid endarterectomy	A			
3	Repair Carotid endarterectomy	A			
3	Vascular bypass procedure	A			
3	Thoracic duct ligation	A			
3	Cervical lymphadenectomy	A			
3	Cervical esophagostomy	A			
3	Thyroidectomy	A			
3	Parathyroidectomy	A			
3	Antireflux Operation	A			
3	Diaphragmatic repair	SR	A		



CEDARS-SINAI MEDICAL CENTER

3	Repair esophageal perforation	SR	A		
3	Gastrectomy	SR	A		
3	Vagotomy	SR	A		
3	Fistula Closure	SR	A		
3	Proctectomy	SR	A		
3	Excision of rectal tumor	SR	A		
3	Splenectomy	SR	A		
3	Splenorrhaphy	SR	A		
3	Choledochotomy/CBDE	SR	A		
3	Cholecystoenteric anastomosis	SR	A		
3	Pancreatic resection	SR	A		
3	Transplantation of renal allograft	A			
3	Nephrectomy	SR	A		
3	Arteriotomy repair	SR	A		



CEDARS-SINAI MEDICAL CENTER

3	Embolectomy/thrombectomy	SR	A		
3	Peripheral bypass procedures	A			
3	Vascular exploration for trauma	SR	A		
3	Ligate/repair bleeding vessel	SR	A		
3	Nephorrhaphy	SR	A		
4	Cricopharyngeal myotomy	A			
4	Zenker's Diverticulectomy	A			
4	Cervical thymectomy	A			
4	Excision of carotid body tumor	A			
4	Paraesophageal hernia repair	A			
4	Esophagectomy (+/- thoracotomy)	A			
4	Esophagomyotomy	A			
4	Esophagostomy	A			
4	Gastric restrictive procedure (+/- bypass)	A			



CEDARS-SINAI MEDICAL CENTER

4	Abdominal Lymphadenectomy	A			
4	Hepatectomy	A			
4	Whipple procedure	A			
4	Pancreaticoenteric anastomosis	A			
4	Donor hepatectomy	A			
4	Transplantation of pancreatic allograft	A			
4	Donor pancreatectomy	A			
4	Transplantation of pancreatic allograft	A			
4	Excision cervical rib	A			
4	Sympathectomy	A			
4	Endovascular repair of AAA	A			
4	Placement of aortic graft	A			
4	Aortofemoral bypass procedures	A			
4	Vascular transposition procedures	A			



CEDARS-SINAI MEDICAL CENTER

4	Visceral bypass procedures	A			
4	Repair/resection visceral aneurysms	A			
4	Endarterectomy	A			
4	Thromboendarterectomy	A			
4	Procedures for portal hypertension	A			
4	Vascular resection/bypass for neoplasm	A			
4	Excision of pancreatic lesion	A			
4	Adrenalectomy	A			
4	Pneumonectomy	A			
4	Lobectomy	A			
4	Thoracoscopy	A			
4	Excision of mediastinal tumor	A			