TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER
Paul L. Foster School *of* Medicine™

Department of Surgery

Educational Goals & Objectives 2011-2012

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Texas Tech Health Sciences Center Surgical Faculty

Faculty Listing

General Surgery
Alan Tyroch MD, FACS, Professor of Surgery and Chair

Stephen Dougherty MD, FACS Professor of Surgery and Residency Program Director

Brian R. Davis MD, FACS Assistant Professor of Surgery, Associate Program Director, and Director of Surgical Simulation

Susan McLean MD, FACS Associate Professor of Surgery and Student Clerkship Director

Angel Morales MD, Assistant Professor of Surgery and Associate Student Clerkship Director

Pediatric Surgery
Don Meier MD Professor of Surgery

William Spurbeck MD Assistant Professor of Surgery

Neurosurgery
Louis Vasquez MD Associate Professor of Surgery

Oral-Maxillo Facial Surgery

Trent Filler MD Assistant Professor of Surgery

ENT
Miller Rhodes MD Associate Professor of Surgery

Ophthalmology

Benjamin Burt MD Assistant Professor of Surgery

Plastic Surgery

Frank Agullo MD Assistant Professor of Surgery

William Miller MD Professor of Surgery

Humberto Palladino MD Assistant Professor of Surgery

Resident Listing

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Mentor Ahmeti, MD

Jose Castro, MD

Victor J. Olivas, MD

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Soumo Banerji, MD

Gino Castaneda, MD

Carrie Dieker, MD

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Ziad Kronfol, MD

Kinzie Matlock, MD

Victor Phuoc, MD

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Alonso Andrade, MD

John McCowan, MD

Jodi Smith, MD

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Chad Cooper, MD

Monika Jadhav, MD

Teshy John, MD

John Rienhart, MD

Alejandro Rios, MD

Nathaniel Ng, MD

Forward by Brian R. Davis MD, FACS

Texas Tech University Health Sciences Center of El Paso has served the communities of El Paso, Texas and Juarez Mexico as an approved ACGME resident training site for over thirty years. From the inception of Thomason Hospital through the transition to University Medical Center this institution has prided itself on training both surgeons throughout the community as well as graduates that have pursued excellent subspecialty training. Dr Edward Saltzstein was the chairman through 2002 followed by the current tenure of Alan Tyroch MD who became the founding chairman of the Paul L Foster School of Medicine in 2009. Dr Steven Dougherty serves as program director at the zenith of a thirty-year career as an academic expert in surgical infectious disease.

Thomason Hospital first became a Trauma Level 1 certified center in 2005 and serves as the regional trauma center for El Paso, West Texas, and Southern New Mexico. Significant admissions also occur from our sister city Juarez. Modernized ICU care is considered the best in the city with 30 private ICU beds including both separate pediatric and cardiac critical care units. Currently with the recent expansion of the emergency department we serve as the highest volume provider of outpatient urgent, emergency and trauma care in our region.

Surgical education has been championed by Dr Susan McLean who is in charge of the student clerkship. Dedication to student didactics has proven rewarding for residents and faculty who experience an exceptional quality of interaction with many students who matriculate into surgical residencies throughout the country. Her work also involves residents as educators in the Advanced Trauma Life Support curriculum as well as during scheduled resident didactic sessions. Recent additions to surgical education includes a simulation laboratory opened in 2010 with laparoscopic towers.

Research and other scholarly activity play an important role in resident development for both those pursuing fellowship specialty training and surgeons pursuing community practice. Dr Tyroch has championed the National Trauma Practitioner Databank for studies on adrenal insufficiency and seatbelt sign outcomes. Dr McLean has proven an academic leader in the field of abdominal compartment syndrome and abdominal wall closure. Dr Davis has accompanied several residents to national conferences for poster presentations. Dr Davis also has active research collaborations with basic science labs investigating the role of Mycobacterium avium paratuberculosis in Crohn's disease and gastric electrical stimulators for the treatment of gastro paresis.

Surgical oncology has been a strong component of training in elective general surgery. The breast clinic has been staffed by Dr Edward Saltzstein. Laparoscopic approaches to colonic malignancies have been promoted with the recruitment of Angel Morales MD as staff colorectal surgeon. Hepatobiliary cases have been a focus of Brian Davis MD with a multidisciplinary approach with surgeon directed ERCP therapy followed by surgical resection of pancreatic, biliary and hepatic tumors.

Our philosophy at Texas Tech University Health Science Center Paul L. Foster School of Medicine Department of Surgery is to provide the highest level of service and care to our community as physicians committed to exceptional education and mentoring of the next generation of surgeons.

Texas Tech Health Sciences Center Surgical Resident Training Philosophy

Standardization of resident training has resulted in excellence throughout the United States. Specialization has been driven by technology with further advances in safety and quality. The foundation of innovation continues to be the domain of the broadly trained general surgeon. Training in general surgery has been the most arduous in medicine, producing the most skilled practitioners. The manpower prognostications of the last three decades have demonstrated an enormous demand for general surgeons with shortages predicted for the upcoming decade. Our program has not only adhered to requirements of the American Board of Surgery but has also provided exceptional exposure to all fields of general surgery in an experience of educational supervision and graduated autonomy.

Challenges to the training system have been prompted by recent demands for educational and resident work hour accountability. These challenges require innovative solutions to provide the same education with fewer hours and more faculty constraints. Adequate participation in graduated teaching and responsibilities of residents as physician educators help bridge the gap. Standardized curricula have been endorsed to promote passage of the certifying and qualifying exams for the American Board of Surgery. Our philosophy is to empower trainees to access the evidence-based literature and achieve skills in life-long learning that will not only help them pass exams but also achieve optimum patient care.

Skill acquisition has to be demonstrated in a controlled environment with repeat performance to achieve automaticity within the 5 years required for competency. Recent hours restrictions have reinforced the need for instructional training whether

through laparoscopic simulation boxes which can be used in a trainees home or under direct faculty observation in our lab. No matter the environment, the emphasis remains that each resident demonstrate competency in the broad range of surgical skills needed to be a general surgeon prior to graduation.

Graduated autonomy refers to the process of graded responsibility for patient care that occurs as a young surgeon progresses through our program. That autonomy includes an obligation to participate in the education of medical students and junior house officers. The era of limited work hours necessitates that autonomy be accompanied by masterful communication for adept maintenance of quality care and patient safety.

Professional behavior encompasses both treatment of patients with compassionate care and respectful communication with faculty, consultants, and ancillary care staff. Every surgeon in training should focus on the most effective/efficient care of their patient who often relies on assistance and critical communication from a litany of specialists from nurses, to speech therapists and senior faculty from other disciplines. Cross cultural sensitivity also plays a critical role in effective treatment of our population which may suffer trepidation from language and religious barriers to medical screening and access to care.

Teamwork and effective mentoring plays the most important factor in shaping the surgeons which enter our training program. To always keep the end in mind, we train our staff to be the kind of doctors we would want caring for ourselves or our family in the hour of our greatest trauma.

Educational Goals and Objectives for the General Surgery Residency Program

The Core Competencies in General Surgery

The Accreditation Council for Graduate Medical Education (ACGME), including the Residency Review Committee (RRC) for surgery has adopted a set of general competencies for all physicians who complete higher training programs in an effort to create measureable outcomes and improve standardization of the training process. In the future all chief residents will be assessed as competent in these areas prior to receiving certification for completion of residency training and undergoing examination for certification by the American Board of Surgery.

The 6 core competencies include:

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 their training level and be ale to develop and execute patient care plans.

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

Practice-Based Learning and Improvement that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care. Surgical residents are expected to critique personal practice outcomes and demonstrate recognition of the importance of lifelong learning in surgical practice.

Interpersonal and Communication Skills that result in effective information exchange and learning with patients, their families, and other health professionals. Surgical residents are expected to communicate effectively with other health care professionals, counsel and educate patients and families and effectively document practice activities. **Professionalism**, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Surgical residents are expected to maintain high standards of ethical behavior, demonstrates a commitment to continuity of patient care, and demonstrates sensitivity to age, gender and culture of patients and other health care professionals. **Systems Based Practice**, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and systems of health care and the ability to effectively call on system resources to provide care that is of optimal value. Surgical residents are expected practice high quality, cost effective patient care, demonstrate knowledge of risk-benefit analysis, and demonstrate an understanding of the role of different specialists and other health care professionals in overall patient management.

The major educational goal of the General Surgery Residency Training Program in the Department of Surgery at Texas Tech University Health Sciences Center is to produce a board-certified surgeon capable of independently practicing general surgery of the highest quality. On completion of the program, the surgeon should good general knowledge, clinical judgment, technical skills and personality attributes to establish rapport with patients and families for the practice of general surgery, and be assessed as competent in the areas outlined under the ACGME's six core competencies. The six

core competencies will be acquired over 5 years of training by obtaining new knowledge through clinical experience, reading current literature through web-based media, attending conferences as well as preparing reports for presentation and publication. Knowledge of the clinical course of disease will be understood by management of surgical patients in the clinics, hospital wards, emergency department and ICU. Technical skills to perform operations will be acquired through observation, simulation, and performance of a variety of surgical procedures over the training period. Intra-operative decision making will be modeled by faculty in pre-operative checklists, intra-operative Socratic teaching as well as in post-operative debriefings. Decision making will also cover problem based learning and improvement during morbidity and mortality conferences. The resident will record each operation performed or assisted with, in keeping with practice based learning, in the ACGME case log system. This operative log will be reviewed as part of the resident's ongoing evaluation process. Communication skills will be developed by case presentations and resident prepared conferences where practice based learning and improvement will disclose scenarios of special import, exceptional decision making and cases of morbidity or mortality. The professional ability to interact appropriately with referring physicians and consultants as well as nursing staff will be acquired through 360 evaluations throughout the training period.

General Educational Goals and Objectives for Residents Rotating on All Services

The following goals and objectives are presented in the format of the ACGME's six core competencies and should be considered additive to the goals and objectives of individual rotations.

PGY-1

A. Medical Knowledge.

1. Learn in-depth the fundamentals of basic science as they apply to the clinical practice of surgery.

    a. The resident must prepare for and attend the Thursday morning didactics structures around the SCORE curriculum. The resident should read all assigned topics from the SCORE curriculum using either ACCESS Surgery or other web based media. The resident should take the tests in the SCORE portal.

    b. The resident should prepare for and participate in monthly Selected Readings in General Surgery conferences by reading assigned material and answering questions during discussion. The resident will participate in assessment of medical knowledge by taking the Surgical Core Curriculum tests and the annual ABSITE.

    c. The resident should participate in scheduled delivery and presentation of lectures from the SCORE curriculum as assigned by chief residents.

2. Develop technical skills appropriate to level of training.

    The resident will attend simulation skills training sessions each month on Thursday afternoon from 1-4 PM and will obtain written sign-off in performance of open and laparoscopic skills stations appropriate for his or her level of training. Those residents

post-call on simulation center days can schedule make-up sessions at time appropriate intervals. The resident will demonstrate proficiency in basic open suturing skills and basic laparoscopic skills.

B. Patient Care.

1. The resident should assume care of all patients on the hospital ward and be responsible for admission/discharge of all patients on the hospital wards and day surgery units. The resident should assume care of all patients on the hospital wards and intensive care units.

2. The resident should perform a complete and accurate history and physical examination on every new admission to the service.

3. The resident should perform all invasive procedures on ward and ICU patients, with appropriate supervision from faculty or a PGY-5 resident.

4. The resident should arrange for appropriate diagnostic and imaging tests on ward patients.

5. The resident should insure proper disposition and follow-up of all patients discharged from the hospital.

C. Interpersonal and Communication Skills.

1. The resident should be able to clearly, accurately, and succinctly present patient information to faculty and senior residents regarding newly admitted patients.

2. The resident should keep the senior resident and faculty aware of all progress of all patients and will alert the senior resident and faculty of new problems on the service.

3. The resident should clearly, accurately, and respectfully communicate with nurses and other hospital employees.

4. The resident should clearly, accurately, and respectfully communicate with referring and consulting physicians, including residents.

5. The resident should clearly, accurately, and respectfully communicate with patients and appropriate members of their families about identified disease processes (including complications), the expected courses, operative findings and operative procedures.

6. The resident should maintain clear, concise, accurate and timely medical records including (but not limited to) admission history and physical examination notes, consultation notes, progress notes, written and verbal orders, operative notes, and discharge summaries.

7. The resident should be able to clearly and accurately teach medical students about the procedures performed on this rotation when qualified and credentialed to do so by hospital and program policy.

8. The resident will ensure that all student ward notes are accurate, reflect a proper plan, and are countersigned by a physician each day.

D. Practice-Based Learning and Improvement

1. The resident will write an accurate, detailed and legible preoperative assessment note on all patients for which he/she serves as the surgeon of record.

2. The resident must enter all procedures and operative cases in which he /she is the surgeon of record into the ACGME database within 24 hours of completing the procedure.

3. The resident must dictate an accurate and descriptive narration of the operative procedure in which he/she is the primary surgeon within 24 hours of the procedure.

4. The resident must be prepared to participate in discussions at morbidity and mortality conferences for cases in which they were involved with critical portions of the care.

E. Systems-Based Practice

1. The resident should be able to appropriately utilize, in a timely and cost efficient manner, ancillary services including social services, discharge planning, physical therapy, nutrition services, pharmacy and physician extenders.

2. The resident should be able to determine and covey to appropriate individuals the instruments and other materials necessary for all procedures.

3. The resident should be able to justify all diagnostic tests (including laboratory studies) ordered and document when needed.

F. Professionalism

1. The resident must be honest with all individuals at all times in conveying patient care issues.

2. The resident should place the needs of the patient above all the needs or desires of him/herself.

3. The resident should maintain high ethical behavior in all professional activities.

4. The resident should remain compliant with all required training designated by the Texas Tech Department of Compliance and University Medical Center.

5. The resident must demonstrate a commitment to the continuity of patient care through carrying out professional responsibilities or through assuring that those responsibilities are fully and accurately conveyed to others acting in his/her stead (e.g. checkout procedures).

6. The resident must understand the institutional policy on duty hours and remain compliant with all duty hour regulations.

7. The resident should be professionally attired at all times while engaged in patient care.

8. The resident should be professionally groomed at all times when engaged in patient care.

9. The resident should demonstrate sensitivity to issues of age, race, gender and religion with patients, families, and members of the health care team.

10. The resident should at all times treat patients, families, and all members of the health care team with respect.

11. The resident should reliably be present in pre-arranged places at prearranged times except when actively engaged in the treatment of a medical or surgical emergency. The resident must notify the appropriate supervisor if he or she will be unable to be present.

12. The resident must attend the following mandatory conferences.

Multi-Department Morbidity and Mortality	Trauma Morbidity and Mortality
General Surgery Morbidity and Mortality	Grand Rounds
Anesthesia Peri-operative Rounds	Surgical Core Curriculum Conference
Mock Orals	Selected Readings Conference

PGY-2

A. Medical Knowledge

1. Learn in-depth the fundamentals of basic science as they apply to the clinical practice of surgery.

a. The resident must prepare for and attend the Thursday morning didactics structures around the SCORE curriculum. The resident should read all assigned topics from the SCORE curriculum using either ACCESS Surgery or other web based media. The resident should take the tests in the SCORE portal.

b. The resident should prepare for and participate in monthly Selected Readings in General Surgery conferences by reading assigned material and answering questions during discussion.

c. The resident should participate in scheduled delivery and presentation of lectures from the SCORE curriculum as assigned by chief residents.

d. The resident should prepare and deliver morbidity and mortality presentations for trauma morbidity and mortality and general surgery morbidity and mortality conferences.

2. Develop technical skills appropriate to level of training.

The resident will attend simulation skills training sessions each month on Thursday afternoon from 1-4 PM and will obtain written signoff in performance of laparoscopic skills stations appropriate for his or her level of training. Those residents post-call on simulation center days can schedule make-up sessions at time appropriate intervals. The resident will demonstrate proficiency in intermediate open suturing skills, intermediate laparoscopic skills, skills in advanced vascular access. and basic skills in gastrointestinal endoscopy.

3. The resident will participate in assessment of medical knowledge by taking the semi-monthly Surgical Core Curriculum tests and the annual ABSITE.

B. Patient Care.

1. The resident should assume care of all patients in the critical care units and hospital wards as well as assuming responsibility for the evaluation and disposition of all consults generated by the emergency department or other hospital service.

2. The resident should perform a complete and accurate history and physical examination on every new admission to the critical care unit and from the emergency department.

3. The resident should make daily assessments plans on every patient in the intensive care unit and every inpatient consult, and have full knowledge of all medical problems and progress of such patients.

4. The resident should assist interns in completion of procedures and perform all invasive procedures on patients in the critical care units.

5. The resident should assist in service organization, including daily care of patients on the hospital ward and outpatient units.

C. Interpersonal and Communication Skills.

1. The resident should be able to clearly, accurately, and succinctly present patient information to critical care faculty regarding newly admitted patients.

2. The resident should keep the senior resident and faculty aware of all progress of all critical care unit patients and will alert the senior resident of new problems on the service.

3. The resident should clearly, accurately, and respectfully communicate with nurses and other hospital employees.

4. The resident should clearly, accurately, and respectfully communicate with referring and consulting physicians, including residents.

5. The resident should clearly, accurately, and respectfully communicate with patients and appropriate members of their families about identified disease processes (including complications), the expected courses, operative findings and operative procedures.

6. The resident should maintain clear, concise, accurate and timely medical records including (but not limited to) admission history and physical examination notes, consultation notes, progress notes, written and verbal orders, operative notes, and discharge summaries.

7. The resident should be able to clearly and accurately teach medical students about the procedures performed on this rotation.

8. The resident will ensure that all ICU student notes are accurate, reflect a proper plan, and are countersigned by a physician each day.

9. The resident should gain competence in communicating with family members to deliver prognosis and describe patient care plans as well as obtaining advanced directives.

D. Practice-Based Learning and Improvement

1. The resident will write an accurate, detailed and legible preoperative assessment note on all patients for which he/she serves as the surgeon of record.

2. The resident must enter all procedures and operative cases in which he /she is the surgeon of record into the ACGME database within 24 hours of completing the procedure.

3. The resident must dictate an accurate and descriptive narration of the operative procedure in which he/she is the primary surgeon within 24 hours.

4. The resident must be present complications from the emergency department or critical care unit in discussions at Trauma morbidity and mortality conferences for cases in which they were involved.

E. Systems-Based Practice

1. The resident should be able to appropriately utilize, in a timely and cost efficient manner, ancillary services including social services, pastoral care, discharge planning, physical therapy, occupational therapy, speech therapy, nutrition services, pharmacy and physician extenders.

2. The resident should be able to summarize the financial costs, the risks and benefits of the proposed diagnostic studies and therapeutic procedures in the intensive care unit.

3. The resident should be able to determine and covey to appropriate individuals the instruments and other materials necessary for all procedures in the operating room and intensive care unit.

4. The resident should be able to justify all diagnostic tests (including laboratory studies) ordered and document when needed.

E. Professionalism

1. The resident must be honest with all individuals at all times in conveying issues of patient care.

2. The resident should place the needs of the patient above all the needs or desires of him/herself.

3. The resident should maintain high ethical behavior in all professional activities.

4. The resident should remain compliant with all required training designated by the Texas Tech Department of Compliance and University Medical Center.

5. The resident must demonstrate a commitment to the continuity of patient care through carrying out professional responsibilities or through assuring that those responsibilities are fully and accurately conveyed to others acting in his/her stead (e.g. checkout procedures).

6. The resident must understand the institutional policy on duty hours and remain compliant with all duty hour regulations. Residents must enter the number of hours spent in the hospital into the departmental datasheet within four days of duty.

7. The resident should be professionally attired at all times while engaged in patient care.

8. The resident should be professionally groomed at all times when engaged in patient care.

9. The resident should demonstrate sensitivity to issues of age, race, gender and religion with patients, families, and members of the health care team.

10. The resident should at all times treat patients, families, and all members of the health care team with respect.

11. The resident should reliably be present in pre-arranged places at prearranged times except when actively engaged in the treatment of a medical or surgical emergency. The resident must notify the appropriate supervisor if he or she will be unable to be present.

12. The resident must attend the following mandatory conferences.

Multi-Department Morbidity and Mortality	Trauma Morbidity and Mortality
General Surgery Morbidity and Mortality	Grand Rounds
Anesthesia Peri-operative Rounds	Surgical Core Curriculum Conference
Mock Orals	Selected Readings Conference

PGY-3

A. Medical Knowledge.

1. Learn in-depth the fundamentals of basic science as they apply to the clinical practice of surgery.

    a. The resident must prepare for and attend the Thursday morning didactics structures around the SCORE curriculum. The resident should read all assigned topics from the SCORE curriculum using either ACCESS Surgery or other web based media. The resident should take the tests in the SCORE portal.

    b. The resident should prepare for and participate in monthly Selected Readings in General Surgery conferences by reading assigned material and answering questions during discussion.

    c. The resident should prepare and present Selected Readings in General Surgery Conference including factual presentation and questions for discussion.

2. Develop technical skills appropriate to level of training.

    a. The resident will attend simulation skills training sessions each month on Thursday afternoon from 1-4 PM and will obtain written signoff in performance of open and laparoscopic skills stations appropriate for his or her level of training. Those residents

post call on simulation center days can schedule make-up sessions at time appropriate intervals. The resident will demonstrate proficiency in advanced open suturing skills and advanced laparoscopic skills including laparoscopic intracorporeal suturing.

3. The resident will participate in assessment of medical knowledge by taking the semi-monthly Surgical Core Curriculum tests and the annual ABSITE.

B. Patient Care.

1. The resident should assume care of all patients on the hospital ward, emergency department and intensive care unit. and be responsible for admission/discharge of all patients on the hospital wards, ICU, emergency department and day surgery units.

2. The resident should perform a complete and accurate history and physical examination on every new admission to the service.

3. The resident should make daily assessments and plans on every ward patient on the service and will have full knowledge of all medical problems and progress of all ward and ICU patients.

4. The resident should perform all invasive procedures on ward and ICU patients.

5. The resident should arrange for appropriate diagnostic and imaging tests on ward and ICU patients.

6. The resident should insure proper disposition and follow-up of all patients discharged from the hospital.

7. The resident should serve as the senior resident responsible for the service with accurate communication with chief residents and faculty including delegation of responsibilities to junior residents.

C. Interpersonal and Communication Skills.

1. The resident should be able to clearly, accurately, and succinctly present patient information to faculty and senior residents regarding newly admitted patients.

2. The resident should keep the senior resident aware of all progress of all patients and will alert the senior resident of new problems on the service.

3. The resident should clearly, accurately, and respectfully communicate with nurses and other hospital employees.

4. The resident should clearly, accurately, and respectfully communicate with referring and consulting physicians, including residents.

5. The resident should clearly, accurately, and respectfully communicate with patients and appropriate members of their families about identified disease processes (including complications), the expected courses, operative findings and operative procedures with assistance from upper level residents.

6. The resident should maintain clear, concise, accurate and timely medical records including (but not limited to) admission history and physical examination notes, consultation notes, progress notes, written and verbal orders, operative notes, and discharge summaries.

7. The resident should be able to clearly and accurately teach medical students about the procedures performed on this rotation when qualified and credentialed to do so by hospital and program policy.

8. The resident will ensure that all student ward notes are accurate, reflect a proper plan, and are countersigned by a physician each day.

9. The resident should gain competence in communicating with family members to deliver prognosis and describe patient care plans as well as obtaining advanced directives.

10. The resident should gain competence in leadership with delegation of responsibility to junior residents and enforcement of discipline to ensure effective management of the service.

D. Practice-Based Learning and Improvement

1. The resident will write an accurate, detailed and legible preoperative assessment note on all patients for which he/she serves as the surgeon of record.

2. The resident must enter all procedures and operative cases in which he /she is the surgeon of record into the ACGME database within 24 hours of completing the procedure.

3. The resident must dictate an accurate and descriptive narration of the operative procedure in which he/she is the primary surgeon within 24 hours.

4. The resident must be prepared to participate in discussions at morbidity and mortality conferences for cases in which they were involved with critical portions of the care.

5. The resident must prepare morbidity and mortality presentations for cases in which they were involved in critical portions of the care.

E. Systems-Based Practice

1. The resident should be able to appropriately utilize, in a timely and cost efficient manner, ancillary services including social services, discharge planning, physical therapy, nutrition services, pharmacy and physician extenders.

2. The resident should be able to summarize the financial costs, the risks and benefits of the proposed diagnostic studies and therapeutic procedures.

3. The resident should be able to determine and covey to appropriate individuals the instruments and other materials necessary for all procedures.

4. The resident should be able to justify all diagnostic tests (including laboratory studies) ordered and document when needed.

5. The resident should delegate responsibilities to junior residents and make appropriate use of ancillary services including physician extenders.

D. Professionalism

1. The resident must be honest with all individuals at all times in conveying patient care issues.

2. The resident should place the needs of the patient above all the needs or desires of him/herself.

3. The resident should maintain high ethical behavior in all professional activities.

4. The resident should remain compliant with all required training designated by the Texas Tech Department of Compliance and University Medical Center.

5. The resident must demonstrate a commitment to the continuity of patient care through carrying out professional responsibilities or through assuring that those responsibilities are fully and accurately conveyed to others acting in his/her stead (e.g. checkout procedures).

6. The resident must understand the institutional policy on duty hours and remain compliant with all duty hour regulations. Residents must enter the number of hours spent in the hospital into the departmental datasheet within four days of duty.

7. The resident should be professionally attired at all times while engaged in patient care.

8. The resident should be professionally groomed at all times when engaged in patient care.

9. The resident should demonstrate sensitivity to issues of age, race, gender and religion with patients, families, and members of the health care team.

10. The resident should at all times treat patients, families, and all members of the health care team with respect.

11. The resident should reliably be present in pre-arranged places at prearranged times except when actively engaged in the treatment of a medical or surgical emergency. The resident must notify the appropriate supervisor if he or she will be unable to be present.

12. The resident must attend the following mandatory conferences.

Multi-Department Morbidity and Mortality	Trauma Morbidity and Mortality
General Surgery Morbidity and Mortality	Grand Rounds
Anesthesia Peri-operative Rounds	Surgical Core Curriculum Conference
Mock Orals	Selected Readings Conference

PGY-4

A. Medical Knowledge.

1. Learn in-depth the fundamentals of basic science as they apply to the clinical practice of surgery.

    a. The resident must prepare for and attend the Thursday morning didactics structures around the SCORE curriculum. The resident should read all assigned topics from the SCORE curriculum using either ACCESS Surgery or other web based media. The resident should take the tests in the SCORE portal.

    b. The resident should prepare for and participate in weekly Selected Readings in General Surgery conferences by reading assigned material and answering questions during discussion.

    c. The resident should present morbidity and mortality conferences from their individual service rotations at outside hospitals.

2. Develop technical skills appropriate to level of training.

    a. The resident will attend simulation skills training sessions each month on Thursday afternoon from 1-4 PM and will obtain written signoff in performance of open and laparoscopic skills stations appropriate for his or her level of training. Those residents

post-call on simulation center days can schedule make-up sessions at time appropriate intervals. Residents on away or out of town rotations will schedule make-up simulation sessions to attain appropriate skill levels.

b. The resident will demonstrate proficiency in basic open suturing skills, basic laparoscopic skills, advance laparoscopic skills, and laparoscopic intestinal anastamosis skills.

c. The resident will participate in assessment of medical knowledge by taking the semi-monthly Surgical Core Curriculum tests and the annual ABSITE.

B. Patient Care.

1. The resident should assume care of all patients on the hospital ward and be responsible for admission/discharge of all patients on the hospital wards ICU, and day surgery units at community hospitals for all external clinical rotations.

2. The resident should perform a complete and accurate history and physical examination on every new admission to the community surgeon's service.

3. The resident should make daily assessments and plans on every patient on the community surgeon's service and will have full knowledge of all medical problems and progress of all patients.

4. The resident should arrange for appropriate diagnostic and imaging tests on patients.

C. Interpersonal and Communication Skills.

1. The resident should be able to clearly, accurately, and succinctly present patient information to community surgeons regarding newly admitted patients.

2. The resident should keep the community surgeons aware of all progress of all patients and will alert the surgeon of new problems on the service.

3. The resident should clearly, accurately, and respectfully communicate with nurses and other hospital employees at community hospitals.

4. The resident should clearly, accurately, and respectfully communicate with referring and consulting physicians.

5. The resident should clearly, accurately, and respectfully communicate with patients and appropriate members of their families about identified disease processes (including complications), the expected courses, operative findings and operative procedures.

6. The resident should maintain clear, concise, accurate and timely medical records including (but not limited to) admission history and physical examination notes, consultation notes, progress notes, written and verbal orders, operative notes, and discharge summaries.

D. Practice-Based Learning and Improvement

1. The resident must enter all procedures and operative cases in which he /she is the surgeon of record into the ACGME database within 24 hours of completing the procedure.

2. The resident must dictate an accurate and descriptive narration of the operative procedure in which he/she is the primary surgeon within 24 hours.

3. The resident must be prepared to participate in discussions at morbidity and mortality conferences for cases in which they were involved with critical portions of the care.

E. Systems-Based Practice

1. The resident should be able to appropriately utilize, in a timely and cost efficient manner, ancillary services including social services, discharge planning, physical therapy, nutrition services, pharmacy and physician extenders.

2. The resident should be able to summarize the financial costs, the risks and benefits of the proposed diagnostic studies and therapeutic procedures.

3. The resident should be able to determine and covey to appropriate individuals the instruments and other materials necessary for all procedures.

4. The resident should be able to justify all diagnostic tests (including laboratory studies) ordered and document when needed.

5. The resident should demonstrate an understanding of procedural coding and insurance issues associated with private practice.

F. Professionalism

1. The resident must be honest with all individuals at all times in conveying patient care issues.

2. The resident should place the needs of the patient above all the needs or desires of him/herself.

3. The resident should maintain high ethical behavior in all professional activities.

4. The resident must understand the institutional policy on duty hours and remain compliant with all duty hour regulations.

5. The resident should be professionally attired at all times while engaged in patient care.

6. The resident should be professionally groomed at all times when engaged in patient care.

7. The resident should demonstrate sensitivity to issues of age, race, gender and religion with patients, families, and members of the health care team.

8. The resident should at all times treat patients, families, and all members of the health care team with respect.

9. The resident should reliably be present in pre-arranged places at prearranged times except when actively engaged in the treatment of a medical or surgical emergency. The resident must notify the appropriate supervisor if he or she will be unable to be present.

10. The resident must attend the following mandatory conferences.

Multi-Department Morbidity and Mortality

Trauma Morbidity and Mortality
Grand Rounds
Surgical Core Curriculum Conference
Selected Readings Conference
General Surgery Morbidity and Mortality
Anesthesia Peri-operative Rounds
Mock Orals

PGY-5 Chief Year

A. Medical Knowledge.

1. Learn in-depth the fundamentals of basic science as they apply to the clinical practice of surgery.

    a. The resident must prepare the curriculum for and attend the Thursday morning didactics structures around the SCORE curriculum. The resident should read all assigned topics from the SCORE curriculum using either ACCESS Surgery or other web based media. The resident should take the tests in the SCORE portal. The resident should help organize and direct the Thursday morning conferences.

    b. The resident should prepare for and participate in monthly Selected Readings in General Surgery conferences by reading assigned material.

    c. The resident should prepare for and participate in the Mock Orals conference.

2. Develop technical skills appropriate to level of training.

    a. The resident will attend simulation skills training sessions each month on Thursday afternoon from 1-4 PM and will obtain written signoff in performance of open and laparoscopic skills stations appropriate for his or her level of training. Those residents post-call on simulation center days can schedule make-up sessions at time appropriate intervals.

b. The resident will demonstrate proficiency in basic open suturing skills, basic laparoscopic skills, advanced laparoscopic skills and laparoscopic intestinal anastamosis skills.

3. The resident will participate in assessment of medical knowledge by taking the semi-monthly Surgical Core Curriculum tests and the annual ABSITE.

B. Patient Care.

1. The resident should assume care of all patients on the hospital wards emergency department and intensive care units and be responsible for admission/discharge of all patients.

2. The resident should round on service patients daily to supervise assessments and plans on every patient on the service and will have full knowledge of all medical problems and progress of all patients.

3. The resident should insure proper disposition and follow-up of all patients discharged from the hospital.

4. The resident should serve in the capacity of faculty during trauma evaluations caring for all trauma and emergency department patients in the absence of direct supervision.

5. The resident should supervise all lower level residents in the completion of bedside procedures on the wards and intensive care units.

C. Interpersonal and Communication Skills.

1. The resident should be able to clearly, accurately, and succinctly present patient information to faculty regarding newly admitted patients.

2. The resident should keep the faculty aware of all progress of all patients and will alert the faculty of new problems on the service.

3. The resident should clearly, accurately, and respectfully communicate with nurses and other hospital employees.

3. The resident should clearly, accurately, and respectfully communicate with referring and consulting physicians, including residents.

4. The resident should clearly, accurately, and respectfully communicate with patients and appropriate members of their families about identified disease processes (including complications), the expected courses, operative findings and operative procedures.

5. The resident should maintain clear, concise, accurate and timely medical records including (but not limited to) admission history and physical examination notes, consultation notes, progress notes, written and verbal orders, operative notes, and discharge summaries.

6. The resident should be able to clearly and accurately teach medical students about the procedures performed on this rotation when qualified and credentialed to do so by hospital and program policy.

7. The resident should develop leadership skills in discipline and delegation in working with junior residents in a supervisory role.

D. Practice-Based Learning and Improvement

1. The resident will write an accurate, detailed and legible preoperative assessment note on all patients for which he/she serves as the surgeon of record.

2. The resident must enter all procedures and operative cases in which he /she is the surgeon of record into the ACGME database within 24 hours of completing the procedure.

3. The resident must dictate an accurate and descriptive narration of the operative procedure in which he/she is the primary surgeon within 24 hours.

4. The resident must be prepared to participate in discussions at morbidity and mortality conferences for cases in which they were involved with critical portions of the care.

5. The resident must discuss general surgery morbidity and mortality and organize conference content with presentation assignments and case assignments for this conference.

E. Systems-Based Practice

1. The resident should be able to appropriately utilize, in a timely and cost efficient manner, ancillary services including social services, discharge planning, physical therapy, nutrition services, pharmacy and physician extenders.

2. The resident should be able to summarize the financial costs, the risks and benefits of the proposed diagnostic studies and therapeutic procedures.

3. The resident should be able to determine and covey to appropriate individuals the instruments and other materials necessary for all procedures.

4. The resident should be able to justify all diagnostic tests (including laboratory studies) ordered and document when needed.

5. The resident should direct the morning and evening checkout processes assuring accurate and efficient exchange of patient information to on-call and night float residents and faculty.

F. Professionalism

1. The resident must be honest with all individuals at all times in conveying issues of patient care.

2. The resident should place the needs of the patient above all the needs or desires of him/herself.

3. The resident should maintain high ethical behavior in all professional activities.

4. The resident should remain compliant with all required training designated by the Texas Tech Department of Compliance and University Medical Center.

5. The resident must demonstrate a commitment to the continuity of patient care through carrying out professional responsibilities or through assuring that those responsibilities are fully and accurately conveyed to others acting in his/her stead (e.g. checkout procedures).

6. The resident must understand the institutional policy on duty hours and remain compliant with all duty hour regulations. Residents must enter the number of hours spent in the hospital into the departmental datasheet within four days of duty.

7. The resident should be professionally attired at all times while engaged in patient care.

8. The resident should be professionally groomed at all times when engaged in patient care.

9. The resident should demonstrate sensitivity to issues of age, race, gender and religion with patients, families, and members of the health care team.

10. The resident should at all times treat patients, families, and all members of the health care team with respect.

11. The resident should reliably be present in pre-arranged places at prearranged times except when actively engaged in the treatment of a medical or surgical emergency. The resident must notify the appropriate supervisor if he or she will be unable to be present.

12. The resident must attend and help direct the following mandatory conferences.

Multi-Department Morbidity and Mortality Trauma Morbidity and Mortality

General Surgery Morbidity and Mortality Grand Rounds

Anesthesia Peri-operative Rounds Surgical Core Curriculum Conference

Mock Orals/ Selected Readings Conference

Goals and Objectives for Specific Services

Service A- Brian R. Davis MD and Stephen Dougherty MD

PGY1

A. Medical Knowledge

1. The resident should learn in-depth the fundamentals of basic science as they apply to patients with elective surgical problems. Examples include elements of wound healing, pathophysiology of cholelithiasis, and surgical anatomy of hernias.

2. The resident should be able to discuss the evaluation and treatment of gallbladder disease.

3. The resident should be understood the principles and rationale for ambulatory management of surgical patients. This will include the preoperative assessment, preoperative management and postoperative care of patients. Examples include assessment of patient risk, selection of patients for outpatient versus inpatient surgery, understanding of social and economic issues associated with outpatient surgery, knowledge of anesthetic options for procedures, and principles of postoperative pain management and wound care. The resident should understand the pathophysiology of appendicitis.

B. Patient Care

1. The resident should accurately perform a complete history and physical examination in patients with common surgical problems.

2. The resident should demonstrate an understanding of the principles of surgical decision-making, with particular reference to the appropriateness of treating problems in an ambulatory setting.

3. The resident should efficiently utilize and interpret diagnostic laboratory testing. Examples of appropriate tests include serum chemistries, hematological profiles, and coagulation tests.

4. The resident should efficiently utilize and interpret diagnostic radiological tests. Examples of studies include mammography, gallbladder ultrasonography, and gastrointestinal studies.

5. The resident should participate in the night-float system for one week of each month on service assuming care for all floor patients during this float period.

6. The resident should be able to assess patients on the ward when called for cross-coverage. Examples include evaluation of patients with fever, oligura, hypotension, respiratory insufficiency, and intractable pain.

7. Under appropriate supervision, perform basic surgical procedures such as:

Open lymph node biopsy (cervical, axillary, groin) Hernia repair (inguinal, femoral, and umbilical)

Excision of small subcutaneous masses Open and laparoscopic appendectomy

C. Interpersonal and Communication Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The resident should use books, journal articles, internet access, and other tools available to learn about diseases and treatments in the ambulatory setting.

2. The resident must attend assigned weekly outpatient clinics.

E. Systems-Based Practice

1. The resident should practice high quality, cost-effective care.

2. The resident should observe and learn the complexities of processing a patient through initial registration, interface with nursing personnel, the outpatient clinic visit, acquisition of test results, operative scheduling, admission to the postanesthesia care area, and discharge.

3. The resident should demonstrate an understanding and commitment to continuity of care by development of a patient care plan including timing of return to work and appropriate follow-up.

F. Professionalism

See general goals and objectives

Service A- Brian R. Davis MD and Stephen Dougherty MD

PGY-2

A. Medical Knowledge

1. The resident should learn pertinent scientific information applicable to preoperative and postoperative conditions.

2. The resident should learn detailed surgical anatomy applicable to procedures. Examples include anatomy of lymphatic's (neck, groin, axilla); anatomy of the structures of the porta hepatic and structures within the triangle of Calot; and anomalous biliary anatomy.

3. The resident should have an in-depth understanding of the various options available for hernia repair and be able to discuss the preoperative variables important in selection of the most appropriate type of repair. Examples include pre-peritoneal repair, laparoscopic repair, and open mesh vs. tissue repairs.

4. The resident should be able to demonstrate an understanding of the principles of surgical decision-making.

B. Patient Care

1. Obtain detailed operative consent and participate in "time out" procedures prior to operations.

2. The resident should be able to identify instruments and supplies that will be necessary for operative procedures on which he or she will serve as surgeon of record.

3. The resident should understand the value of local and regional anesthesia in surgery.

4. Under appropriate supervision, perform intermediate surgical procedures such as:

Open and needle-localization breast biopsy

Laparoscopic cholecystectomy Incisional hernia repair

Sentinel node biopsy Recurrent inguinal hernia repair

C. Interpersonal and Communication Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The resident should use books, journal articles, internet access, and other tools to learn about potential complications commonly seen after ambulatory procedures and how to treat them.

2. The resident must attend assigned weekly outpatient clinics.

E. Systems-Based Practice

1. The resident should participate throughout the course of his or her patient's surgery, including marking the operative sight, being present at induction of anesthesia, positioning the patient, and identifying the extent and area of skin preparation.

2. The resident should observe and learn about timing of discharge after outpatient procedures, including adequate pain control and recovery from general anesthesia.

3. The resident should recognize the importance of a step-by-step approach to planning and implementation in order to increase the efficiency of surgery.

F. Professionalism

See general goals and objectives

Service A- Brian R. Davis MD and Stephen Dougherty MD

PGY-3

A. Medical Knowledge

1. The resident should understand the pathophysiology, presentation, and treatment of acute surgical illness. Examples include peritonitis, acute bowel ischemia, small and large bowel obstruction, esophageal perforation, gastric ulcers, duodenal ulcers, and ascending cholangitis.

2. The resident should be able to differentiate acute and subacute clinical conditions in the spectrum of disease. Examples include biliary tract disease, duodenal ulcer disease, and diverticulitis.

3. The resident should be able to recognize and treat comorbid conditions in the patient with acute surgical illness.

4. The resident should be able to discuss management options for patients with acute surgical illness. Examples include medical management of complications bowel disease, use of percutaneous cholecystostomy, and creation of colostomy vs. primary anastomosis to treat colon perforation.

B. Patient Care

1. The resident should assume supervisory responsibility for the overall care of patients on the service, including personally examining every new admission, knowing the daily progress and new complications of every patient, and making discharge plans.

2. The resident should demonstrate an understanding of the principles of surgical decision-making, including making therapeutic plans for every patient and determining timing of operative intervention.

3. The resident should serve as the senior resident and team leader delegating responsibility for task completion and patient follow up to junior residents.

4. Under appropriate supervision, perform intermediate surgical procedures such as:

Laparoscopic cholecystectomy for acute cholecystitis	Gastric resections
Colectomy	Entrectomy/enterolysis

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The resident should use books, journal articles, internet access, and other tools available to learn about diseases and treatment of patients with acute surgical illness.

2. The residents must attend and participate in the weekly clinics for their service.

E. Systems-Based Practice

1. The resident should be able to communicate with referring physicians from other hospitals and emergency departments.

2. The resident should communicate with his or her peer from the service to determine the optimal use of resources for the hospital, including timing of procedures in the operating room.

F. Professionalism

See general goals and objectives.

Chief Resident Service A- Brian R. Davis MD and Stephen Dougherty MD

PGY-5

A. Medical Knowledge

1. The chief resident should be able to correctly explain the operative approaches for acute surgical conditions of the abdominal cavity and retroperitoneal organs.

2. The chief resident should be able to accurately explain the physiologic rationale for vagotomy, pyloroplasty, gastric resection and reconstructive techniques for ulcer disease, and stoma formation.

3. The chief resident should be able to correctly explain the indications and contraindications for diagnostic and therapeutic endoscopy in the acute setting.

4. The chief resident should be able to discuss the management alternatives for common bile duct stones.

B. Patient Care

1. The chief resident should assume the overall responsibility for all patients on the service, including supervision of the residents assuming direct care responsibilities.

2. The chief resident should serve as teaching assistant for PGY 1-3 residents as they perform operations appropriate to their level.

3. The chief resident must attend weekly outpatient clinics.

4. Under appropriate supervision, the chief resident should perform advanced operative procedures such as: Subtotal gastrectomy Total gastrectomy

Pancreatectomy Hepaticojejunostomy

C. Interpersonal and Communication Skills

See general goals and objectives

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

1. The resident should use books, journal articles, internet access, and other tools available to learn about diseases and treatment of patients with acute surgical illness.

2. The residents must attend and participate in the weekly clinics for their service.

E. Systems-Based Practice

1. The resident should have an understanding about the resources of the county medical system, including the outpatient clinics, hospital based outpatient clinics, and the number of available hospital beds for inpatients.

2. The resident should be able to discuss the impact of the Health Insurance Portability and Accountability Act (HIPAA) on the resources of the county medical system.

3. The resident should understand the rules for transfer of patients to the hospital under the HIPAA regulations.

F. Professionalism

See general goals and objectives.

Service B- Alan Tyroch MD, Susan McLean MD and Angel Morales MD

PGY1

A. Medical Knowledge

1. The resident should understand the principles of ATLS.

2. The resident should be able to identify different forms of shock associated with the injured patient. Examples include hemorrhagic, neurogenic, cardiogenic and septic shock.

3. The resident should understand the indications for, and different types of agents used in prophylactic and therapeutic antibiotic use.

4. The resident should understand appropriate fluid and electrolyte resuscitation.

5. The resident should understand the basic principles in the diagnostic evaluation of single organ system injury.

6. The resident should understand his or her role in the trauma resuscitation team, and be able to perform the appropriate tasks of that role. The resident must be familiar with trauma protocols.

7. The resident should be able to discuss the costs, risks and expected information obtained from non-invasive diagnostic tests to evaluate the injured patient. Examples include plain films, ultrasonography and CT scanning.

8. The resident should understand the costs, risks and expected information obtained from invasive diagnostic rests to evaluate the injured patient. Examples include wound exploration.

B. Patient Care

1. The resident must be aware of his or her limitations and know when to call for help.

2. The resident should assist with resuscitation in trauma patients presenting to the emergency department.

3. The resident should assume responsibility for care of all patients on the hospital ward. including initial assessment, evaluation of daily progress, and initial assessment of new problems.

4. The resident should be able to assess patients on the ward when called for cross-coverage. Examples include evaluation of patients with fever, oligura, hypotension, respiratory insufficiency, and intractable pain.

5. The resident should assume responsibility for discharging patients, including dictating the discharge summary, writing prescriptions, and ensuring appropriate follow-up.

6. The resident should participate in the night-float system for one week of each month on service assuming care for all floor patients during this float period.

7. Under appropriate supervision, the resident should perform basic operative cases such as: Insertion of central venous lines Tracheal intubation

Placement of thoracostomy tubes Tracheostomy

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The resident must successfully pass ATLS.

2. The resident should use books, journal articles, internet access, and other tools available to learn about diseases and treatment of the injured patient.

3. The residents must attend and participate in the weekly clinics for their service.

E. Systems-Based Practice

1. The resident should be able to use appropriate consult services in the hospital to improve the care of his or her patients.

F. Professionalism

See general goals and objectives

Service B-Alan Tyroch MD, Susan McLean MD and Angel Morales MD

PGY-2

A. Medical Knowledge

1. The resident should learn the principles of triage and be able to demonstrate appropriate triage of injured patients based on number of patients, severity of injury and available resources.

2. The resident should review the principles of ATLS and be able to perform a rapid primary survey of the trauma patient, followed by an in depth secondary survey to detect all injuries.

3. The resident should be able to prioritize injuries in the multiply injured trauma patient.

4. The resident should understand the principles of resuscitation of the injured patient, including airway management, fluid administration, blood transfusion, and hemodynamic support.

5. The resident should be able to outline the signs and symptoms as well as the etiology of respiratory failure in the injured patient.

6. The resident should understand the indications for, and the complications of blood component therapy. Examples include PRBC's, FFP, platelets and cryoprecipitate.

7. The resident should understand indications/institution of the massive transfusion protocol.

8. The resident should understand the factors associated with non-surgical bleeding in the injured patient. Examples include hypothermia, dilutional and consumptive coagulopathy.

B. Patient Care

1. The resident should institute the trauma resuscitation protocol in trauma patients presenting to the emergency department.

2. The resident should assume responsibility for care of all patients in the emergency department, including initial assessment, identification of all injuries, creation of a therapeutic plan based on priority of injuries, initial resuscitation, and determination of admission to the hospital ward or to the ICU.

3. Under appropriate supervision, the resident should perform basic procedures such as:

Tracheal intubation	Tracheostomy
Focused abdominal ultrasound for trauma	Initial trauma resuscitation laparotomy

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The resident should use books, journal articles, internet access, and other tools available to learn about diseases and treatment of the injured patient.

2. The residents must attend and participate in the weekly clinics for their service.

E. Systems-Based Practice

1. The resident should be able to communicate with patients, families, nurses, paramedics, and other allied health care personnel.

2. The resident should take responsibility for posting emergency cases in the operating room.

F. Professionalism

See general goals and objectives

ServiceB-Alan Tyroch MD, Susan McLean MD and Angel Morales MD

PGY-3

A. **Medical Knowledge**

1. The resident should be familiar with all organ-based trauma scoring systems.

2. The resident should learn in detail the management of intra-abdominal injuries. Examples include injuries of the liver, spleen, stomach, intestine, colon, pancreas, kidney, bladder, urethra, and diaphragm.

3. The resident should understand rationale and indications for the operative as well as non-operative management of the injured patient.

4. The resident should understand the rationale and indications for the use of adjuncts to both operative and non-operative management of injured patients. Examples include utilization of therapeutic interventional radiological techniques.

5. The resident should understand the pathophysiology of traumatic brain injury, altered mental status and spinal cord injury. The resident should also be able to discuss stabilization and initial treatment of patients with severe neurologic injuries.

B. Patient Care

1. The resident should assume responsibility for the care of all patients on the trauma service.

2. The resident should examine every patient admitted to the service, ensure that all injuries and co morbid medical problems have been identified, and ensure that adequate therapeutic and diagnostic plans have been made.

3. The resident should ensure that all prophylactic precautions are taken to prevent complications such as DVT, stress gastritis, pressure ulceration, and aspiration pneumonia.

4. The resident should make daily rounds and have full knowledge of the medical problems and progress of all patients on the service.

5. The resident should see every consult and ensure that proper disposition has been made.

6. The resident is responsible for ensuring proper posting in the operating room, ensuring that all information regarding communicable illness has been relayed, and alerting the operating room personnel about specific instrument and equipment needs.

7. Under appropriate supervision, the resident should perform intermediate procedures such as:

Exploratory laparotomy	Acquisition of surgical airway
Colostomy, colostomy closure	Emergency thoracotomy
Repair of gastrointestinal injuries	Open splenectomy

C. Interpersonal and Communications Skills

See general goals and objectives

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

1. The resident should use books, journal articles, internet access, anatomy videotapes, and other tools available to learn about diseases and treatment of the injured patient.

2. The residents must attend and participate in the weekly clinics for their service.

E. Systems-Based Practice

1. The resident should be able to communicate with referring physicians from other hospitals and emergency departments.

2. The resident should be able to communicate with families, especially in those instances in which there has been a death.

3. The resident should communicate with his or her peer from the emergency general surgery service to determine the optimal use of resources for the hospital, including timing of procedures in the operating room and recommendation for placing the hospital on divert status.

F. **Professionalism**

See general goals and objectives

ServiceB-Alan Tyroch MD, Susan McLean MD and Angel Morales MD

PGY-5

A. Medical Knowledge

1. The chief resident should be able to discuss in detail the management of complex traumatic injuries. This includes diagnosis, timing of intervention, and therapeutic options. Examples include traumatic disruption of the thoracic aorta, renovascular injuries, injuries of the portal

triad, retro hepatic caval injuries, complex cervical spine fractures, facial fractures, and complex pelvis fractures.

2. The chief resident should be able to explain in detail advanced surgical procedures for management of injuries in the neck, torso and extremities. Examples include management of tracheal injuries, management of flail chest, and management of the mangled extremity.

3. The chief resident should be able to summarize areas of trauma surgery in which patient management is controversial an areas in which change is taking place. Examples include management of penetrating neck injuries, management of colon injuries, and management of minimal vascular injuries.

B. Patient Care

1. The chief resident should be able to direct the entire team through the trauma resuscitation.

2. The chief resident should be able to correctly triage the diagnostic evaluation of the patient with multiple injuries.

3. The chief resident should be able to perform advanced surgical procedures to manage injuries in the neck, torso and extremities.

4. The chief resident should be able to correctly utilize consultants, yet remain responsible for ultimate patient care issues.

5. The chief resident should be able to manage patients with multiple injuries using operative and non-operative techniques correctly.

6. Under appropriate supervision, the chief resident should perform advanced procedures such as

Liver resection for injury	Repair of abdominal, chest, or pelvic vascular injury
Duodenal diverticularization	Repair of urethral injury
Pancreatic resection for trauma	Nephrectomy for trauma

C. Interpersonal and Communication Skills

See General Goals and Objectives

D. Practice-Based Learning and Improvement

1. The resident should use books, journal articles, internet access, anatomy videotapes, and other tools available to learn about diseases and treatment of the injured patient.

2. The resident must attend and participate in the weekly clinics for their service.

E. Systems-Based Practice

1. The chief resident should be able to understand triage of mass casualties

2. The chief resident should understand the multi-disciplinary approach to management of patients with multiple injuries.

3. The chief resident should understand the concept of trauma systems and the need to transfer patients for the appropriate level of care.

F. Professionalism

See general goals and objectives

Surgical Intensive Care Unit-Alan Tyroch MD and Susan McLean MD

PGY1

A. Medical Knowledge

1. The resident should learn in depth the fundamentals of basic science as they apply to patients in the intensive care unit. Examples include anatomy, physiology and pathophysiology of the cardiovascular, respiratory, genitourinary, gastrointestinal, musculoskeletal, hematologic, and endocrine systems.

2. The resident should understand the rationale for admission and discharge criteria in the ICU.

3. The resident should understand factors associated with assessment of preoperative surgical risk. Examples include evaluation of the high risk cardiac patient undergoing non-cardiac surgery.

4. The resident should understand fluid compositions and the effect of the losses of such fluids as gastric, pancreatic and biliary from fistulas at various levels.

5. The resident should understand the indications for, and complications of blood component therapy.

6. The resident should be able to discuss the pathophysiology of respiratory failure.

7. The resident should be able to demonstrate an understanding of acid-base disorders, including diagnosis, etiology, and instituting appropriate treatment.

8. The resident should be able to discuss the pathophysiology, indications, and complications associated with various modes of mechanical ventilation. Examples include ventilator management of ALI, ARDS and thoracic trauma, as well as weaning from ventilatory support.

9. The resident should understand the role of hormones and cytokines in the graded metabolic response to injury, surgery and infection.

10. The resident should understand the indications, routes and complications of administration of parenteral and enteral forms of nutrition.

11. The resident should understand the risk factors and common pathogens that are associated with nosocomial infections.

12. The resident should understand the factors associated with altered mental status. Examples include traumatic, septic, metabolic and pharmacologic causes.

13. The resident should understand the risk factors associated with stress gastritis.

14. The resident should understand the causes and treatment regimens for gastrointestinal bleeding. Examples include bleeding from upper and lower GI sources.

B. Patient Care. Under appropriate supervision, the resident should be able to:

1. Perform endotracheal intubation.

2. Perform the following aspects of ventilatory management: Set up initial and advanced ventilator settings, wean patients from ventilator support, and treat common complications of mechanical ventilation including tube thoracostomy.

3. Correctly utilize prophylaxis for stress gastritis in high risk ICU patients.

4. Initiate appropriate nutritional support through the most optimal route.

5. Manage complications of nutritional support. Examples include hyperglycemia.

6. Assist in managing patients with intracranial hypertension and neurovascular disease.

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The resident should use books, journal articles, internet access, anatomy videotapes, and other tools available to learn about topics related to critical care.

2. The resident must prepare for and attend daily ICU attending rounds.

E. Systems-Based Practice

1. The resident should be able to communicate with patients, families, nurses, and allied health care personnel.

2. The resident should be able to use appropriate consult services to improve care of patients in the intensive care unit.

F. **Professionalism**

See general goals and objectives

Surgical Intensive Care Unit-Alan Tyroch MD and Susan McLean MD

PGY-2

A. Medical Knowledge

1. The resident should have an in depth understanding of the basic science related to problems commonly seen in the intensive care unit setting. Examples include sepsis, respiratory failure, coronary ischemia, shock, malnutrition, stress ulceration, nonocclusive intestinal ischemia, antibiotic associated colitis, antibiotic resistance, jaundice, and renal insufficiency.

2. The resident should understand the pathophysiology of hemodynamic instability. Examples include types of shock, cardiac arrest.

3. The resident should know and apply treatments for arrhythmias, congestive heart failure, acute ischemia and pulmonary edema.

4. The resident should understand adjuncts to the analysis of respiratory mechanics and gas exchange. Examples include work of breathing, rapid shallow breathing index, single breath CO2 analysis and dead space measurements.

5. The resident should understand fluid and electrolyte as well as acid/base abnormalities associated with complex surgical procedures and complications. Examples include massive fluid shifts associated with trauma, shock and resuscitation, high output fistulas and renal failure.

6. The resident should understand the pathophysiology associated with endocrine emergencies in the ICU. Examples include thyroid storm, hyper, hypoparathyroid states and adrenal insufficiency.

7. The resident should be able to discuss the mechanism of action as well as the spectrum of antimicrobial activity of the different antibiotic classes. Examples include carbapenams, extended spectrum penicillin's and fluoroquinolones.

8. The resident should understand the risk factors that result in multiply resistant organisms. Examples include antibiotic dosing, antibiotic synergy and transmission patterns.

9. The resident should be able to discuss the factors that result in an immune-compromised state. Examples include malignancy, major trauma and steroids.

10. The resident should understand the factors associated with bleeding disorders. Examples include DIC, ITP, hemophilia, coagulopathy associated with shock and hypothermia.

11. The resident should understand the pathophysiology of traumatic brain injury and neural disease. Examples include knowledge of intracranial pressure monitoring and maneuvers to normalize ICP.

12. The resident should be able to discuss the pathophysiology, presentation, and causes of hepatic failure.

B. Patient Care. Under appropriate supervision, the resident should be able to:

1. Insert pulmonary artery, central venous and arterial lines, with and without ultrasound guidance.

2. Resuscitate patients from shock and cardiac arrest.

3. Recognize and treat ischemia and arrhythmias on ECG.

4. Utilize correct class of anti-arrhythmic, vasodilators and diuretics as they pertain to cardiac disease.

5. Correctly determine the protein, caloric, electrolyte, fat and vitamin needs of surgical patients, taking into account their underlying disease process.

7. Correctly diagnose and treat gastrointestinal bleeding associated with ulcers, portal hypertension and lower GI sources.

8. Diagnose cause and appropriately alter treatment regimens to compensate for hepatic failure. Examples include altering fluid, protein and drugs regimens.

C. Interpersonal and Communications Skills

See general goals and objectives.

D. Practice-Based Learning and Improvement

1. The resident should use books, journal articles, internet access, anatomy videotapes, and other tools available to learn about topics related to critical care.

2. The residents must prepare for and attend daily ICU attending rounds.

E. **Systems-Based Practice**

1. The resident should function as a member of the ICU team and act as a liaison with each patient's home service to communicate progress and plans for care by the ICU team.

2. The resident should relate concerns from the patient's home team to the ICU service.

3. The resident should be able to work with family to respect patient's end of life wishes, including withdrawal of care in a dignified manner.

4. The resident should be able to communicate with the organ bank to coordinate care for organ donation.

F. **Professionalism**

See general goals and objectives

Surgical Intensive Care Unit-Alan Tyroch MD and Susan McClean MD

PGY-3

A. Medical Knowledge

1. The resident should have an in depth understanding of the basic science related to problems commonly seen in the intensive care unit setting. Examples include sepsis, respiratory failure, coronary ischemia, shock, malnutrition, stress ulceration, non-occlusive intestinal ischemia, antibiotic associated colitis, antibiotic resistance, jaundice, and renal insufficiency.

2. The resident should understand the pathophysiology of hemodynamic instability. Examples include types of shock, cardiac arrest.

3. The resident should know and apply treatments for arrhythmias, congestive heart failure, acute ischemia and pulmonary edema.

4. The resident should understand adjuncts to the analysis of respiratory mechanics and gas exchange. Examples include work of breathing, rapid shallow breathing index, single breath CO2 analysis and dead space measurements.

5. The resident should understand fluid and electrolyte as well as acid/base abnormalities associated with complex surgical procedures and complications. Examples include massive fluid shifts associated with trauma, shock and resuscitation, high output fistulas and renal failure.

6. The resident should understand the pathophysiology associated with endocrine emergencies in the ICU. Examples include thyroid storm, hyper, hypoparathyroid states and adrenal insufficiency.

7. The resident should be able to discuss the mechanism of action as well as the spectrum of antimicrobial activity of the different antibiotic classes. Examples include carbapenams, extended spectrum penicillin's and fluoroquinolones.

8. The resident should understand the risk factors that result in multiply resistant organisms. Examples include antibiotic dosing, antibiotic synergy and transmission patterns.

9. The resident should be able to discuss the factors that result in an immune-compromised state. Examples include malignancy, major trauma and steroids.

10. The resident should understand the factors associated with bleeding disorders. Examples include DIC, ITP, hemophilia, coagulopathy associated with shock and hypothermia.

11. The resident should understand the pathophysiology of traumatic brain injury and neural disease. Examples include knowledge of intracranial pressure monitoring and maneuvers to normalize ICP.

12. The resident should be able to discuss the pathophysiology, presentation, and causes of hepatic failure.

B. Patient Care

1. Under appropriate supervision, the resident should assist the junior residents with placement of central venous lines, pulmonary artery catheters, and other invasive procedures.

2. The resident should be able to identify and minimize factors associated with nosocomial infections and be able to utilize appropriate adjunctive measures to diagnose and treat nosocomial infection.

3. The resident should be able to utilize pharmokinetics and drug levels to adjust antibiotic dosing, utilize appropriate combinations of antibiotics to achieve synergy, and appropriately utilize isolation precautions.

4. The resident should be able to appropriately use intracranial pressure monitoring, including interpretation of hemodynamic and ICP data.

5. The resident should be able to initiate therapy to maintain cerebral perfusion pressure and minimize secondary brain injury.

6. The resident should be able to initiate and maintain salvage modes of ventilation such as airway pressure release, bi-level and oscillatory ventilation.

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The resident should use books, journal articles, internet access, anatomy videotapes, and other tools available to learn about topics related to critical care.

2. The resident must prepare for and attend daily ICU attending rounds.

E. Systems-Based Practice

1. The resident should function as a member of the ICU team and act as a liaison with each patient's home service to communicate patient progress and plans for care by the ICU team.

2. The resident should relate concerns and advice from the patient's home team to the ICU service.

3. The resident should be able to communicate with referring physicians from outside the medical system about patients in the ICU.

4. The resident should be able to discuss the role of surgeons in the ICU as well as the role of consultants.

5. The resident should be able to discuss the mechanism for ICU performance improvement.

F. Professionalism

See general goals and objectives

Consult Service- All Faculty

PGY 2

A. Medical Knowledge

1 The resident should learn in-depth the fundamentals of basic science as they apply to the clinical practice of general surgery and, more specifically, to the practice of endocrine surgery, colorectal surgery, hernia surgery, open and laparoscopic gastrointestinal surgery. Examples include elements of wound healing, physiological principles of endocrinology, management of fluid and electrolyte balance, and surgical anatomy and surgical pathology of the intra-abdominal organs.

2. The resident should be able to demonstrate knowledge of the principles and rationale for management of surgical patients, including preoperative assessment, perioperative management and postoperative care of patients. Examples include assessment of patient risk, selection of patients for inpatient surgery, knowledge of anesthetic options for procedures, and principles of postoperative pain management and wound care.

3. The resident should be able to efficiently utilize and interpret diagnostic laboratory testing. Examples of appropriate tests include serum chemistries, liver function tests, arterial blood gas analysis, hematological profiles, coagulation tests and thyroid function studies.

4. The resident should be able to efficiently utilize and interpret diagnostic radiological tests. Examples of the types of studies include chest x-ray, computed tomography, radio nucleotide scintigraphy, ultrasonography, arteriography and gastrointestinal studies.

B. Patient Care

1. The resident should assume responsibility for all consultations from the emergency department for general surgery and trauma admissions his/her assigned service, including

performing an advanced history and physical examination, writing admission orders, and reviewing appropriate diagnostic tests.

2. Under appropriate supervision, perform basic surgical procedures such as:

Flexible and rigid proctosopy Laparoscopic and open appendectomy

Hernia repair (inguinal, femoral, umbilical) Drainage of breast abscess – Incision

Drainage of perirectal abscess

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The resident should use books, journal articles, internet access, and other tools available to learn about treatment of surgical problems commonly seen inpatient hospital setting.

E. Systems-Based Practice

1. The resident should learn about appropriate follow-up correspondence with referring physicians and consulting physicians.

2. The resident should be able to communicate with the surgery attending and hospital personnel regarding care of patients.

F. **Professionalism**

See general goals and objectives

Consult Service- All Faculty

PGY 3

A. Medical Knowledge

1.The resident should learn in depth the management of common surgical conditions that present to hospitals, including (but not limited to) upper and lower gastrointestinal bleeding, small and large bowel obstruction, pancreatitis, biliary obstruction, cholecystitis, and the acute abdomen.

2. The resident should be able to recognize and stratify co-morbid conditions in the patient with surgical illness.

3. The resident should be able to discuss management options for patients with co-morbid medical conditions to reduce the risk of morbidity and mortality, including treatment of the co-morbid condition, postponing the operation, and altering the type of operation or choosing a less invasive procedure.

4. The resident should be able to correctly diagnose and understand principles of treatment of common surgical complications and surgical emergencies. Examples include electrolyte imbalance, failure of homeostasis, surgical infection, renal failure, pulmonary insufficiency, cardiac abnormalities, shock, peritonitis, limb ischemia, gastrointestinal hemorrhage, hypocalcaemia, neck hematoma and adrenal insufficiency.

B. Patient Care

1. The resident should assume responsibility for the care of all consult patients from the emergency department, including close supervision of the PGY 2 as they perform the direct care of these patients.

2 .After discussions with the chief resident, the resident should discuss patient progress and any new problems with the attending faculty.

3. Under appropriate supervision, the resident should be able to perform intermediate operative procedures such as:

Emergency laparotomy for the acute abdomen
Colectomy with colostomy
Laparoscopic cholecystectomy for cholecystitis
Repair of incarcerated hernias

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

The resident should use books, journal articles, internet access, and other tools available to learn about treatment of surgical conditions commonly seen in the community hospital setting.

E. Systems-Based Practice

1. The resident should be able to communicate with the referring physician.

2. The resident should be able to acquire the necessary consultative services to assess and reduce operative risk.

F. Professionalism

See general goals and objectives.

Consult Service- All Faculty

PGY 5

A. Medical Knowledge

1. The chief resident should learn in depth the principles of management of complex surgical problems seen in the tertiary hospital setting. Examples include recurrent thyroid cancer, recurrent hyperparathyroidism, Barrett's esophagus, intestinal fistulas, and transected bile ducts.

2. The chief resident should be able to correctly describe the pathophysiology of multisystem problems of the alimentary tract and digestive system, including neurohumeral and hormonal interactions.

3. The chief resident should be able to accurately analyze the medical preparation of patients for complex operations.

4. The chief resident should be able to accurately describe the surgical options for patients with complex problems, including an analysis of the risk vs. benefit for all procedures.

5. The chief resident should be able to accurately explain the physiologic rationale for the following gastrointestinal operations: vagotomy, pyloroplasty, gastric resection for ulcer disease, small bowel resection, stoma formation, and drainage of pancreatic pseudocysts (open internal vs. open external vs. percutaneous).

6. The chief resident should be able to accurately describe advanced operative procedures performed by the practicing general surgeon. Examples include thyroidectomy, parathyroidectomy, Heller myotomy, surgical procedures for gastroesophageal reflux, surgical procedures for gastroduodenal ulcer disease, bariatric procedures, subtotal colectomy, abdominoperineal resection, adrenalectomy and neck dissection for thyroid cancer.

B. Patient Care

1. The chief resident should assume overall responsibility for all patients consults, including close supervision of the junior residents who are caring for the patients directly.

2. The chief resident should personally examine all patients who develop new problems in the emergency department and ensure that the attending has been notified.

3. The chief resident should serve as teaching assistant in appropriate cases for junior residents.

4. Under appropriate supervision, the resident should be able to perform intermediate operative procedures such as:

Emergency laparotomy for the acute abdomen and trauma Total and partial gastrectomy

Colectomy and colostomy for intestinal perforation Enterectomy with primary anastamosis

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The chief resident should use books, journal articles, videotapes, internet access, and other tools available to learn about treatment of complex surgical conditions seen in the tertiary hospital setting.

E. Systems-Based Practice

1. The chief resident should be able to accurately summarize financial costs, risks and benefits of all proposed diagnostic and therapeutic procedures.

2. The chief resident should be determine and convey to the appropriate individuals the instruments and other materials necessary for all procedures in order to minimize waste of resources.

3. The chief resident should be able to communicate with the referring physician, consulting physicians, outpatient office, hospital admissions office, and allied personnel to ensure smooth and efficient coordination of care for all patients.

Anesthesiology Service

PGY-1

A. Medical Knowledge

1. Gain a more thorough understanding of depolarizing (succinylcholine) and nondepolarizing (vecuronium, rocuronium, cis-atracurium, pancuronium, etc.) muscle relaxants. Explore potential risks and benefits of each drug in different clinical settings.

2. Understand the indications for and dosing of a pharmacologic presser agent (epinephrine, phenylephrine, norepinephrine, dobutamine).

3. Understand the alternatives for and hemodynamic consequences of inhalational anesthetic (isoflurane, halothane, sevoflurane and nitrous oxide).

4. Review ACLS protocol for cardiac rhythm disturbances; local anesthetic pharmacology and dosing for use as a local, subarachnoid block (spinal anesthetic) or epidural use; regional anesthetics (spinal, epidural, Bier block, interscalene, axillary, etc.)

B. Patient Care

1. Apply principles of noninvasive monitoring.

2. Understand risks and indications for invasive hemodynamic monitoring.

3. Understand the alternatives, dosing and clinical indications for various intravenous anesthetic induction agents (Sodium thiopental, propofol, etomidate, ketamine, etc.)

4. Become familiar with conscious sedation techniques. Explore alternatives in intra operative and postoperative pain management (intravenous agents, local anesthetics, NSAIDS, PCA, epidural).

5. Improve technical skills for airway management including airway assessment and risk factors and approach for management of the difficult airway.

6. Learn the anesthetic machine checkout necessary prior to giving an anesthetic.

7. Improve technical skills for placing peripheral IVs central lines and arterial lines.

C. Interpersonal and Communication Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The resident should use textbooks, journal articles, internet access, and other available tools to learn in depth about anesthesiology.

2. The resident must attend all anesthesia department educational conferences.

E. Systems-Based Practice

1. The resident should have an appreciation for the close interactions between the general surgeon and the anesthesiologist.

2. The resident should develop an understanding of alternative options for pain control during and following surgery and their implications on overall patient care.

F. Professionalism

See general goals and objectives.

GI Service

PGY-2

A. Medical Knowledge

1. The resident should learn advanced basic science as applied to gastrointestinal physiology. Examples include the pathophysiology of esophageal motility disorders, gastroesophageal reflux disease, peptic ulcer disease, gastrointestinal bleeding, medical management of the complications of portal hypertension, hepatitides, hepatobilary disease, intestinal dysmotility syndromes, pancreatic insufficiency, intestinal ischemia, diarrhea syndromes.

2. The resident should be able to recognize and diagnose gastrointestinal disorders.

3. The resident should be able to correctly describe the use of endoscopes in the diagnosis and treatment of upper and lower gastrointestinal hemorrhage.

4. The resident should be able to accurately assess the complications that may result from flexible endoscopic procedures, including hemorrhage and perforation.

B. Patient Care

1. The resident is expected to function as an integral member of the GI consultation service. In this regard, the resident must assume responsibility for initial evaluation of all new consults, including an advanced history and physical examination with a particular emphasis on GI physiology and co-morbid conditions.

2. The resident should assume responsibility for ensuring that each patient has been properly resuscitated prior to any endoscopic intervention.

3. The resident should assume responsibility for monitoring the daily progress on all patients on whom he or she has served as a consultant.

4. Under appropriate supervision, the resident should be able to perform endoscopic procedures such as Esophagogastroduodenoscopy - minimum 35 procedures total over five years

Flexible and rigid sigmoidoscopy Colonoscopy-minimum of 50 procedures over 5 years

Under appropriate supervision the resident should be able to perform the following therapeutic maneuvers utilizing the endoscope.

Dilation	Laser ablation
Sclerotherapy	Electrocautery
Polyp excision	

C. Interpersonal and Communication Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The resident should use textbooks, journal articles, internet access, and other available tools to learn in depth about medical and endoscopic treatment of gastrointestinal disorders.

2. The resident must attend all service-specific clinics.

3. The resident must attend all service-specific conferences.

E. Systems-Based Practice

1. The resident should have an appreciation for the close interactions between the general surgeon and the gastroenterologist.

2. The resident should develop an understanding of minimally invasive options available to treat gastrointestinal disorders.

F. Professionalism

The resident must assume responsibility for notifying the attending of any planned absences from the service for any reason (interviews, attending the American College of Surgeons meeting, etc.) well in advance of the beginning of the rotation.

Community Surgery Services (Providence, Del Sol, Las Palmas Medical Centers)

PGY 4

A. Medical Knowledge

1. The resident should understand the pathophysiology and clinical presentation of common general surgery problems encountered in community practice. Examples include hernias, breast

pathology, biliary tract pathology, diseases of the colon and rectum, lung tumors, and diseases of the esophagus.

2. The resident should learn the indications for general surgery procedures and understand the surgical options available. Examples include open versus minimally invasive surgical options for abdominal surgery (especially laparoscopic procedures).

3. The resident should be able to perform advanced assessment of risk/benefits for all interventions relevant to general surgery procedures.

4. The resident should recognize surgical problems that can be appropriately treated in the outpatient versus inpatient setting. Examples include hernia repairs and breast biopsy.

B. Patient Care

1. Under the direct supervision of the attending, the resident should evaluate patients in the outpatient setting, make a treatment plan, arrange for appropriate diagnostic tests, and arrange for scheduling procedures.

2. The resident should write a concise and descriptive preoperative counseling note on all patients under his or her care.

3. The resident should dictate an accurate and descriptive operative note for every case on which he or she has participated at the level of surgeon of record.

4. The resident should write daily progress notes on all patients under his or her care in the intensive care unit or ward.

5. The resident should make a discharge plan, dictate a discharge note, and arrange for follow-up of all patients under his or her care.

6. The resident must see patients after discharge in the office or other outpatient setting.

C. Interpersonal and Communication Skills

1. The resident should be able to communicate with referring physicians, consulting physicians and allied health professionals.

2. The resident must communicate with the attending for patients under his care on a daily basis to discuss progress on plans.

3. The resident must alert the attending to any problems or significant changes in progress of the patients under his or her care.

D. Practice-Based Learning and Improvement

1. The resident must maintain an accurate log of all operations performed during the rotation.

2. The resident should use readily available sources of medical information such as textbooks, journal articles, and web based tools.

E. Systems-Based Practice

1. The resident should understand the role of the private practitioner in the overall delivery of health care. This includes knowledge of care delivery systems, role of the practitioner as a member of the health care team, and regulatory restrictions for exchange of medical information.

2. The resident should understand basic management and financial issues in modern private surgical practice. Examples include coding and billing procedures, supervision of office personnel, and regulatory/licensure compliance.

F. Professionalism

The resident must adhere at all times to the principles of professionalism outlined in the general goals and objectives.

Surgical Oncology (Dr Landeros)

PGY-4

A. Medical Knowledge

1. The resident should be able to demonstrate knowledge of tumor staging based on the TNM classification system for malignancies. Examples include extremity soft tissue sarcoma, melanoma, and other coetaneous malignancy.

2. The resident should learn in depth the management of malignancies, including screening, diagnosis, medical and surgical treatment options, and follow-up.

3. The resident should be able to discuss prognosis for patients with cancer based on tumor site, pathology, stage, and the functional status of the patient.

4. The resident should be able to perform advanced assessment of risk/benefits for all interventions relevant to cancer management.

5. The resident should be able to discuss the difference between and indications for prophylactic surgery vs. palliative surgery vs. surgery with curative intent. The resident should be able to demonstrate knowledge of the patient factors (e.g. staging information) that may recommend one approach over another.

6. The resident should be able to demonstrate a thorough understanding of components and interventions involved in terminal care.

B. Patient Care

1. The resident should work closely with the attending and assume a major role in the care for designated patients, including inpatients and outpatients.

2. The resident should be able to perform ultrasound in the clinic and operating room for: evaluation of breast diseases, screening for liver metastases, evaluation of lymph nodes and soft-part tumors, guidance of tissue sampling procedures.

3. Under appropriate supervision, the resident should be able to perform advanced surgical procedures in cancer patients such as radical resection of soft tissue tumors, amputations, wide local excision of melanoma, sentinel lymph node staging, completion lymphadenectomy, gastrectomy, extended abdominal lymphadenectomy, liver resection, and colon and rectal resections.

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

The resident should use books, journal articles, operative videotapes, internet access, and other tools available to learn about neoplastic diseases and treatment of patients with cancer.

E. Systems-Based Practice

1. The clinical resident should understand the team approach to treatment of cancer patients and be able to discuss how surgical oncologists interface with other services including medical oncology, radiation oncology, visiting nurses, and hospice care.

2. The clinical resident should understand the financial implications of cancer treatment, including hospital/physician costs, loss of employment time, outpatient chemotherapy, and nursing home care.

F. Professionalism

See general goals and objectives

Cardiothoracic Surgery Service

PGY-4

A. Medical Knowledge

1. The resident should understand advanced basic science as applied to cardiac, esophageal, and pulmonary physiology. Examples include the pathophysiology of atherosclerosis, pathophysiology and natural history of pulmonary malignancy, pulmonary function abnormalities in chronic obstructive pulmonary disease, and frequency/death rates of thoracic malignancies.

2. The resident should learn about the diagnosis and management of mediastinal tumors.

3. The resident should understand the indications and appropriate tests available for screening patients for thoracic disease. The resident should be able to discuss risk factors for cardiac/pulmonary/esophageal disease, typical presenting symptoms, and patterns of coexistence such as COPD and coronary artery disease in smokers.

4. The resident should be familiar with diagnostic tests available to detect and categorize cardiac disease. Examples include the treadmill exercise test, dipyridamole thallium scintigraphy, adenosine echocardiography, MUGA scan, CT-based coronary calcification score, CT angiography, catheter-based coronary angiography.

5. The resident should be able to perform advanced assessment of indications and risk/benefit for all interventions in patients with cardiovascular disease. Examples include optimal medical management, endovascular procedures, coronary bypass, and heart transplantation.

6. The resident should understand the stepwise evaluation and management of the patient with an asymptomatic lung lesion.

7. The resident should understand changes in pulmonary function after lung resection and be able to determine whether a lung lesion is resectable on the basis of baseline pulmonary function tests.

8. The resident should be familiar with valvular heart disease, including natural history, presentation, diagnosis, available therapeutic options, and postoperative management.

9. The resident should be familiar with the evaluation and management options for patients with esophageal disease, including functional disorders, traumatic injuries (perforation and caustic injuries), and neoplasm's.

B. Patient Care

1. The resident should function as a member of the cardiothoracic team and assume responsibility for all care on his or her assigned patients. This must include admission responsibilities, daily evaluation of progress and detection of new problems, preoperative preparation, and discharge responsibilities.

2. The resident should be able to demonstrate ability to manage thoracic and cardiovascular surgery patients in the critical care setting including management of patients who may or may not require surgical intervention such as those with endocarditis, pleural effusion, and empyema.

3. Under appropriate supervision, the resident should be able to perform more advanced procedures such as:

Open and video-assisted decortication *Mediastinotomy and mediastinoscopy*

Pulmonary wedge resection *Lobectomy and pneumonectomy*

Thoracotomy Lung biopsy *Thymectomy Chest wall resection*

C. Interpersonal and Communication Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

1. The resident should use textbooks, journal articles, internet access, and other tools to learn advanced concepts in cardiothoracic surgery.

2. The resident must attend all service-specific clinics.

E. Systems-Based Practice

1. The resident should understand the interrelationship of the cardiothoracic surgeon, pulmonologist, cardiologist, medical oncologist, and rehabilitation specialist in the overall management of the patient with cardiothoracic disease.

2. The resident should be aware of community programs for risk factor modification smoking cessation clinics.

3. The resident should be aware of community screening programs such as cholesterol screening and vascular laboratory outreach programs.

F. Professionalism

See general goals and objectives

Vascular Surgery

PGY-4

A. Medical Knowledge

1. The resident should be able to demonstrate advanced knowledge of the medical management of atherosclerosis.

2. The resident should understand the natural history of common vascular problems including but not limited to asymptomatic aneurysm, asymptomatic carotid stenosis, transient ischemic attacks, asymptomatic renal artery stenosis, claudication, rest pain, and tissue loss.

3. The resident should be able to demonstrate detailed knowledge about the etiology, diagnosis, and treatment of the diabetic foot.

4. The resident should recognize common angiographic abnormalities including atherosclerosis, embolism, aneurysm, and vascular dissection.

5. The resident should demonstrate knowledge about the indications and outcomes for common vascular operations and endovascular procedures (lower extremity revascularization, aneurysm repair, carotid endarterectomy, mesenteric/renal bypass, and varicose vein ablation).

B. **Patient Care**

1. The resident should know all of the patients on the service. He or she must see every new admission and be aware of the problems and progress of all patients.

2. Activities will include examination and evaluation of new patients, perioperative and postoperative care of established patients, and surgical consultations under the supervision of attending surgeons.

3. Under appropriate supervision, the resident should be able to perform advanced vascular operations such as:

Balloon angioplasty and stenting of lower extremity arteries

Carotid endaretectomy Catheter based arteriography

Elective aortic revascularization Femoropopliteal and femorodistal bypass

C. Interpersonal and Communications Skills

See general goals and objectives

D. Practice-Based Learning and Improvement

The resident should utilize textbooks, journal article and internet tools to learn the principles of vascular surgery during the rotation.

E. Systems-Based Practice

See general goals and objectives

F. Professionalism

See general goals and objectives

Pediatric Surgery Service

PGY4

A. Medical Knowledge

1. The resident should learn in depth the fundamentals of basic and embryologic science as applied to congenital anomalies. Examples include embryologic development of the peritoneal cavity, normal rotation and fixation of the abdominal viscera, the physiologic changes of birth, fluid and electrolyte requirements by weight, normal physiologic parameters in newborns and children, VACTERL association, imperforate anus, congenital diaphragmatic hernia, intestinal atresia, tracheoesophageal fistula and major physiologic and anatomic differences of babies and children compared to adults.

2. The resident should be able to recognize, diagnose, and initiate treatment for complex surgical problems and emergencies unique to the neonatal pediatric surgical patient, including resuscitation, evaluation of coexistent abnormalities, diagnostic tests, and treatment options in premature newborns and infants. Examples include biliary atresia, tracheoesophageal fistula, congenital diaphragmatic hernia, omphalocele, gastroschisis, imperforate anus, meconium ileus, Hirschsprung's disease, malrotation, mid-gut volvulus, intestinal atresias, necrotizing enterocolitis, intestinal obstruction, congenital abdominal masses, ovarian cyst, intestinal duplication, Meckel's diverticulum and non-accidental trauma.

3. The resident should learn the assessment and management logistics of a multi-discipline pediatric trauma system in which patient care is delivered by Pediatric Surgery trauma teams, Pediatric Critical Care teams, Pediatric Emergency Medicine teams, numerous physician assistants and advanced trauma surgery nurse practitioners.

4. The resident should learn the appropriate adjuvant and surgical treatment for pediatric solid tumors. Examples are hepatoblastoma, hepatic cell carcinoma, teratoma, germ cell tumors, Wilm's tumor, neuroblastoma, and rhabdo-myosarcoma.

5. The resident should learn to assess and treat newborn, infants and children with surgical amenable critical care problems. Examples include venous and arterial access, feeding access, hemo- and peritoneal dialysis access, supplemental enteral and parenteral nutrition strategies, and pediatric ventilator management modalities.

B. Patient Care

1. The resident should assume responsibility for committed participation in a service management team consisting of pediatric surgery faculty, pediatric resident peers, advanced surgical nurse practitioners and physician assistants for the care of all patients.

2. The resident should assume shared responsibility for care of all Pediatric ICU and Neonatal ICU patients with a critical care management team consisting of NICU personnel and pediatric surgery faculty. Responsibilities include daily assessment, comprehensive documentation and orders, bedside operative procedures, and comprehensible and appropriate communication between surgical and non-surgical teams.

3. The resident should be able to participate in surgery for problems in neonates and all children with complex surgical problems. Examples of such procedures are:

Insertion of central venous catheter and arterial line in infants

Exploratory laparotomy and stoma formation for necrotizing enter colitis

Pull through procedure for Hirschsprung's disease Thoracotomy for tumor removal

Video assisted thoroscopic surgery (VATS) for empyema

Assessment for bilaterality in inguinal hernia Nissen fundoplication (laparoscopic and open)

Splenectomy (laparoscopic and open) Repair of intestinal atresia

Operative reduction of intussusception Exploratory laparotomy for trauma

Posterior sagittal anoplasty for imperforate anus Repair of chest wall deformity

Pyloromyotomy Repair of incarcerated inguinal hernia

Nephrectomy for Wilm's tumor

C. **Interpersonal and Communication Skills**

See general goals and objectives.

D. Practice Based Learning and Improvement

1. The resident should use textbooks, journal articles, Internet access, and other available tools to learn about diseases of infants and children.

2. The resident must attend all service-based clinics on a weekly basis.

E. Systems-Based Practice

1. The resident should be able to communicate with families, referring physicians, and consultants, under the supervision and direction of the attending.

2. The resident should have an appreciation of pediatric conditions that warrant treatment in a medical setting that is designed to meet the special needs of infants and children.

3. The resident should understand the close interactions between pediatrician and pediatric surgeon in the care of children and infants with surgical illness.

4. The resident should be able to discuss the problem of child abuse, including identifying injuries consistent with abuse, understanding the need to admit victims for protection, and knowing how to contact the appropriate authorities to report suspected cases of abuse.

F. Professionalism

See general goals and objectives

Transplant Surgery Service PGY 4- Texas Transplant Institute- San Antonio, TX

A. Medical Knowledge

1. Develop and understanding of the specific clinical problems encountered in recipients of organ transplants, especially the kidney.

2. Through experience participating in the management and by review of pertinent medical literature, become knowledgeable regarding criteria of organ donation.

3. Understand the social and ethical issues relating to organ supply and recipient designation and selection.

4. Understand the pathophysiology and clinical manifestations of more common diseases causing renal failure.

5. Understand the timing of referral for transplant evaluation based on the natural history and clinical manifestations of those diseases commonly resulting in the need for liver or kidney transplantation.

6. Become aware of the clinical problems specific to transplant patients.

B. Patient Care

1. Understand utilization of the clinical examination as well as diagnostic, biochemical and microbiologic tests and radiologic intervention in the management of the immunocompromised patient.

2. Be familiar with the management of the following in the transplant patient: hypokalemia, fluid balance, diabetes, fever of unknown origin, hypertension, sepsis, wound infection and malnutrition.

3. Learn the manifestations of transplant rejection.

4. Understand the roles of renal nuclear scans, ultrasonography, arteriography, and biopsy in the diagnosis of kidney graft dysfunction.

5. Develop a detailed understanding of the longitudinal care of the (potential) recipient both before and after transplant.

6. Develop an expertise in formulating a comprehensive renal transplant consultation.

7. Appreciate the complexities of planning and implementing living related or cadaveric renal transplantation.

8. Become competent in the management of post-transplant renal patients.

9. Gain operative experience in judgment and technically demanding cases that require high levels of intellectual and manual skill.

10. Become thoroughly familiar with the anatomy of the retroperitoneal-iliac arterial and venous area. Understand the technical variations between arterial and venous anastamoses.

11. Develop an understanding of the problems associated with performing vascular anastamoses in the deep restricted fields typically encountered in renal transplant.

C. Interpersonal and Communication Skills

1. Demonstrate compassion for the families of donor organs when appropriate.

2. Discuss the ethical implications of transplantation with recipient patients.

D. Practice Based Learning and Improvement

Participate in any quality review or morbidity and mortality conferences held at the Texas Transplant Institute in San Antonio.

E. Systems Based Practice

1. Discuss the organ shortage and societal solutions to address the ethical implications of living donor transplants.

2. Discuss the costs and ethics of the transplant process including organ donor collection organizations, waiting lists and state/Medicare/Medicaid reimbursement for organ transplant services.

F. Professionalism

1. The resident will treat the faculty, nurses and ancillary staff of Texas Transplant Institute with the utmost authority and respect while visiting their institution.

2. The resident will respect all rules and restrictions of transplant/organ collection agencies while participating in organ harvest operations.