

**RONALD REGAN UCLA MEDICAL CENTER PEDIATRIC INTENSIVE CARE UNIT  
GOALS AND OBJECTIVES BY ROTATION**

<b>GOALS</b>	<b>EDUCATIONAL OBJECTIVES</b>	<b>CLINICAL RESPONSIBILITIES / ACTIVITIES</b>	<b>EVALUATIONS</b>
<p><b>Patient Care:</b> To provide the resident with advanced clinical experience in the anesthetic management of adults and children undergoing surgical treatment of diseases that is compassionate, appropriate, and effective.</p>	<p>To acquire skills in:</p> <ol style="list-style-type: none"> <li>1. Placement/Removal of central and arterial lines</li> <li>2. Interpretation of Pulmonary Artery Catheter Readings/Tracings</li> <li>3. Interpretation of Electrocardiograms</li> <li>4. Interpretation of Arterial Blood Gases</li> <li>5. Interpretation of Chest X-rays               <ol style="list-style-type: none"> <li>a) Central Line Placement</li> <li>b) Identification of Pneumothorax</li> <li>c) Endotracheal Tube Placement</li> <li>d) Adult and pediatric Chest X-ray interpretation</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. One resident will be assigned to the PACU for each two-week period. Typically, 40 or more patients recover each day in the PACU, providing a broad exposure to many surgical and patient profiles.</li> <li>2. Except for patients who are transferred directly to the intensive care units (e.g. postoperative cardiac, liver transplant, NICU patients) and some monitored anesthesia care patients, all patients receiving an anesthetic recover in the PACU. It is not unusual to have intubated or medically complex patients in the PACU. Occasionally, the PACU will board patients overnight. These patients may require the PACU resident's assistance in the management of their care.</li> <li>3. The PACU resident should check in with the Perioperative Attending each day and should also check in with the PACU charge nurse. If the resident leaves the PACU, the charge nurse must be informed if alternate coverage is to be provided.</li> <li>4. Take Report from primary anesthesiologist on patient's admission to PACU</li> </ol>	<ol style="list-style-type: none"> <li>1. Monthly on-line faculty evaluations.</li> <li>2. 360 evaluations.</li> <li>3. Quarterly meeting with program director.</li> </ol>

		<ol style="list-style-type: none"> <li>5. Assess condition of patient on admission to PACU</li> <li>6. Evaluate and manage problems occurring in the PACU <ol style="list-style-type: none"> <li>a) Obtain appropriate laboratory and radiological studies as needed</li> <li>b) Consult with primary anesthesia and surgical teams as appropriate</li> <li>c) Obtain additional consultations as needed</li> <li>d) Assess Patient's Readiness for Discharge from the PACU and the SAU</li> </ol> </li> <li>7. Respond to All Emergency Situations. Always consult with the primary surgical team significant changes in a patient's condition and planned disposition (e.g. admission to a monitored unit rather than a typical floor).</li> <li>8. Residents are responsible for 1 lecture to be given to the nurses in the PACU once during the rotation on any topic related to recovery room care.</li> <li>9. Residents may participate in simulation.</li> </ol>	
<p><b>Medical Knowledge:</b> To acquire the advanced clinical and applied science knowledge pertinent to the management of the postoperative patient.</p>	<p>Basic Science Knowledge</p> <ol style="list-style-type: none"> <li>1. Physiological changes associated with surgery <ol style="list-style-type: none"> <li>a) CNS</li> <li>b) respiratory</li> <li>c) Cardiovascular</li> <li>d) Renal</li> <li>e) Gastrointestinal</li> <li>f) Thermoregulation</li> <li>g) Acid-Base</li> </ol> </li> <li>2. Metabolism and elimination of anesthetic drugs <ol style="list-style-type: none"> <li>a) Opioids and opioid antagonists</li> <li>b) Benzodiazepines and benzodiazepine antagonists</li> <li>c) NSAIDS</li> <li>d) Muscle relaxants and reversal agents</li> <li>e) Local anesthetics</li> <li>f) Inhalational anesthetic agents</li> <li>g) Anti-emetic drugs</li> <li>h) Vasoactive agents - inotropes and vasodilators</li> </ol> </li> </ol> <p>Clinical Knowledge</p> <ol style="list-style-type: none"> <li>1. PACU admission criteria</li> <li>2. PACU discharge criteria <ol style="list-style-type: none"> <li>a) Discharge planning (to hospital floor and to home)</li> <li>b) Unexpected admission planning</li> </ol> </li> <li>3. Evaluation and management of common PACU problems <ol style="list-style-type: none"> <li>a) Fluid replacement</li> <li>b) Crystalloid</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Individual supervision and instruction by the perioperative faculty.</li> <li>2. Directed independent study.</li> <li>3. Annually scheduled lectures.</li> <li>4. Simulation curriculum</li> <li>5. Daily lectures on a one-on-one basis as determined by the cases of the day. Subjects include topics listed under Educational Objectives.</li> </ol>	<ol style="list-style-type: none"> <li>1. Monthly on-line faculty evaluations.</li> <li>2. Quarterly meeting with program director.</li> </ol>

	<ul style="list-style-type: none"> <li>c) Colloid</li> <li>d) Blood - transfusion reactions</li> <li>4. Increased intracranial hypertension</li> <li>5. Delayed awakening</li> <li>6. Postoperative agitation and delirium</li> <li>7. Postoperative pain - Epidural/caudal catheter management (one-sided, incomplete, patchy blocks)</li> <li>8. Prolonged neuromuscular weakness</li> <li>9. Respiratory problems <ul style="list-style-type: none"> <li>a) Airway obstruction</li> <li>b) Stridor/wheezing</li> <li>c) Hypoventilation</li> <li>d) Hypoxemia</li> <li>e) Pulmonary aspiration</li> <li>f) Pulmonary edema <ul style="list-style-type: none"> <li>i Post-obstructive</li> <li>ii Fluid overload</li> </ul> </li> </ul> </li> <li>10. Cardiovascular problems <ul style="list-style-type: none"> <li>a) Hypertension</li> <li>b) Hypotension</li> <li>c) Dysrhythmias</li> <li>d) Myocardial ischemia</li> <li>e) Bleeding/coagulopathies</li> </ul> </li> <li>11. Postoperative nausea and emesis</li> <li>12. Renal problems <ul style="list-style-type: none"> <li>a) Oliguria</li> <li>b) Polyuria</li> <li>c) Hematuria</li> <li>d) Urinary retention</li> <li>e) Electrolyte and metabolic abnormalities</li> </ul> </li> <li>13. Hypothermia/hyperthermia - malignant hyperthermia</li> <li>14. Anaphylaxis <ul style="list-style-type: none"> <li>a) Ventilator management</li> <li>b) Determine when postoperative ventilation is necessary</li> <li>c) Weaning of postoperative patients from ventilation support</li> </ul> </li> </ul>		
<p><b>Practice Based Learning:</b> To be able to investigate and evaluate their own patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices.</p>	<ul style="list-style-type: none"> <li>1. Learn to critically evaluate the postoperative, and airway management guidelines and supporting literature.</li> <li>2. Learn to critically evaluate the anesthesia literature.</li> <li>3. Apply scientific evidence to decision making.</li> <li>4. Become familiar with postoperative quality assurance indicators.</li> <li>5. Compare evidence-based practice to commonly taught experience based decision making to develop a personal practice strategy.</li> <li>6. Understand how to assess the impact of one's actions on outcomes</li> </ul>	<ul style="list-style-type: none"> <li>1. Participation in departmental Q/A</li> <li>2. Obtain feedback from the perioperative attending and individual anesthesiologist responsible for the intraoperative care of patients being evaluated.</li> <li>3. Review and discuss postoperative guidelines and supporting literature with the perioperative attending.</li> <li>4. Faculty lectures on statistics and critical literature evaluation.</li> <li>5. Attend resident simulation.</li> </ul>	<ul style="list-style-type: none"> <li>1. Daily faculty-resident interaction in the PACU.</li> <li>2. Self evaluations.</li> <li>3. Monthly on-line faculty evaluations.</li> <li>4. Quarterly meeting with program director.</li> </ul>

<p><b>Interpersonal and Communication Skills:</b> To be able to demonstrate communication skills that result in effective information exchange and appropriate interaction with colleagues, surgeons, patients, and ancillary personnel</p>	<ol style="list-style-type: none"> <li>1. Understand the importance of effective communication with patients and their families, nurses, nurse practitioners and physician colleagues.</li> <li>2. Understand the role of teamwork and demonstrate the ability to manage consulting services.</li> <li>3. To learn techniques to decrease patient and patient family anxiety.</li> <li>4. Demonstrate the ability to effectively communicate concerns with surgeons.</li> <li>5. Learn effective communication techniques during period of severe stress, anxiety and complex patient care.</li> </ol>	<ol style="list-style-type: none"> <li>1. Modeling by the perioperative faculty</li> <li>2. Experience teaching medical students in the operating room.</li> </ol>	<ol style="list-style-type: none"> <li>1. Daily faculty-resident interaction in the PACU.</li> <li>2. 360 evaluations.</li> <li>3. Monthly on-line faculty evaluations.</li> <li>4. Feedback medical students.</li> <li>5. Quarterly meeting with program director.</li> </ol>
<p><b>Professionalism:</b> Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.</p>	<ol style="list-style-type: none"> <li>1. Demonstrate compassionate and respectful behaviors when interacting with patients and their families.</li> <li>2. Learn communication techniques with patients and families of different cultural backgrounds who possibly speak little English.</li> <li>3. Demonstrate sensitivity to patients various age, gender, ethnic, and religious backgrounds.</li> <li>4. Learn how to discuss and record cases with complications and/or poor outcomes.</li> <li>5. Demonstrate a commitment to advocating patient care that is appropriate for their individual needs.</li> <li>6. Adhere to institutional and departmental standards and policies.</li> <li>7. Demonstrate ability to appropriately take on, share and delegate patient care responsibilities.</li> <li>8. Demonstrate the ability to effectively balance one's own personal affairs with clinical and educational duties as outlined in this document.</li> </ol>	<ol style="list-style-type: none"> <li>1. Modeling by the supervising faculty.</li> <li>2. Attendance at conferences where many of these issues are discussed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Daily faculty-fellow interaction in the operating room.</li> <li>2. 360 evaluations.</li> <li>3. Monthly on-line faculty evaluations.</li> <li>4. Quarterly meeting with program director.</li> </ol>
<p><b>Systems Based Medicine:</b> To be familiar with the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.</p>	<ol style="list-style-type: none"> <li>1. Be able to assist patients in dealing with system complexities.</li> <li>2. Learn how to consult or work as a team member with health care managers or providers to assess, coordinate, and improve health care.</li> <li>3. Understand how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.</li> <li>4. Understand how their patient care and other professional practices affect other health care professionals, other medical services, and how these elements of the system affect anesthesiology/pain practices.</li> <li>5. Learn how to do cost analysis for health care systems.</li> <li>6. Understand the complex systems that form the foundation for care of patients suffering from a variety of surgical diseases.</li> <li>7. Learn how to effect improved operating room efficiency safely.</li> <li>8. Appreciate the complex interactions that go on between primary care teams, consulting services, surgeons and anesthesiologist in the overall hospital management of these complex patients.</li> <li>9. Be able to implement accuracy and efficiency in preoperative evaluation.</li> <li>10. Learn how to effectively use information management in the preoperative evaluation.</li> </ol>	<ol style="list-style-type: none"> <li>1. Interact with intensive care, surgical and nursing services in a unique environment, which will require sensitivity to structured and multidisciplinary, simultaneous patient care.</li> <li>2. Attend resident simulation.</li> </ol>	<ol style="list-style-type: none"> <li>1. Daily faculty-fellow interaction in the operating room.</li> <li>2. 360 evaluations.</li> <li>3. Monthly on-line faculty evaluations.</li> <li>4. Quarterly meeting with program director.</li> </ol>