

## RONALD REGAN UCLA MEDICAL CENTER ADVANCED CARDIAC AND TRANSPLANT ANESTHESIA GOALS AND OBJECTIVES BY ROTATION

GOALS	EDUCATIONAL OBJECTIVES	CLINICAL RESPONSIBILITIES / ACTIVITIES	EVALUATIONS
<p><b>Patient Care:</b> To provide the resident with advanced clinical experience in the anesthetic management of adults and pediatric cardiac surgical patients that is compassionate, appropriate, and effective.</p> <p>The patient population includes neonates, infants and adults with congenital and acquired heart disease. This enables a unique training to residents in the anesthetic management of patients with a wide variety of cardiac lesions, aortic pathology, and lung and heart transplantation.</p> <p>At the end of the cardiac rotation at the CA-3 level, residents will gain expertise to enable them to conduct in a safe anesthetic for a patient undergoing cardiac</p>	<p>To acquire skills in:</p> <ol style="list-style-type: none"> <li>1. Placement of arterial catheter</li> <li>2. Placement of pulmonary artery catheter</li> <li>3. Transesophageal echo</li> <li>4. Double Lumen Intubation</li> <li>5. Flexible Fiberoptic Intubation</li> </ol>	<ol style="list-style-type: none"> <li>1. A one month rotation on the service will include daily clinical assignments of a cardiac case with an attending cardiac anesthesiologist. Typically one resident is assigned to this cardiac rotation every month.</li> <li>2. The resident will perform the preoperative assessment, discuss the case with the attending the night before and, be directly involved in the management of the case.</li> <li>3. Nonclinical time will be allotted to the resident to enhance knowledge about transesophageal echocardiography.</li> <li>4. In addition to significant teaching during the supervised case, residents will participate in a monthly journal club and a monthly TEE workshop. There is a weekly M&amp;M, combined surgical, cardiology and anesthesia conferences in conjunction with cardiac faculty.</li> <li>5. The residents will receive a manual for the CT service which is designed to provide them with knowledge about the rotation, which includes literature about various cardiovascular lesions and pathology and</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>

<p>surgery for acquired and congenital heart disease.</p>		<p>their anesthetic implications.</p> <ol style="list-style-type: none"> <li>6. The resident on this rotation will have opportunity to spend time with cardiologists to further enhance training in transesophageal echocardiography.</li> <li>7. Residents will be scheduled in the Cardiac Service call and on occasion be scheduled on the OR call.</li> <li>8. 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 surgical patient.</p>	<ol style="list-style-type: none"> <li>1. Improved understanding of the physiology of normal and pathologic cardiovascular system</li> <li>2. Knowledge of the pharmacology of anesthetic agents and their effects on the cardiovascular system, drugs commonly used in the treatment of heart disease, and their interaction with anesthetic drugs</li> <li>3. Advanced understanding of cardiopulmonary bypass and its anesthetic implications</li> <li>4. Review the pathogenesis, diagnosis and treatment of cardiac dysrhythmias</li> <li>5. Additional experience with placement of invasive monitoring lines (arterial, central and pulmonary artery), and their interpretation.</li> <li>6. Additional experience with the hemostatic changes that occur with cardiopulmonary bypass and the blood products and drugs used to improve coagulation.</li> <li>7. A more advanced introduction to transesophageal echocardiography</li> <li>8. Anesthetic management of adult patients having: <ol style="list-style-type: none"> <li>a) Coronary artery bypass surgery</li> <li>b) Valvular heart surgery</li> <li>c) Repair of congenital heart defect</li> <li>d) Heart and lung transplantation</li> <li>e) Patients undergoing ventricular assist device placement</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Preanesthetic evaluations.</li> <li>2. Individual supervision and instruction in the operating room.</li> <li>3. Directed independent study.</li> <li>4. Annually scheduled lectures.</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>
<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>	<ol style="list-style-type: none"> <li>1. Use information technology, on-line resources, expert consultation, and primary texts to expand their knowledge base.</li> <li>2. Learn to critically evaluate the anesthesia literature.</li> <li>3. Apply scientific evidence to decision making.</li> <li>4. Compare evidence-based practice to commonly taught experience based decision making to develop a personal practice strategy.</li> <li>5. Understand how to assess the impact of one's actions on outcomes.</li> </ol>	<ol style="list-style-type: none"> <li>1. Obtain feedback from the supervising faculty.</li> <li>2. Review and discuss supporting literature with the supervising faculty.</li> <li>3. Participation in departmental Q/A</li> <li>4. Faculty lectures on statistics and critical literature evaluation.</li> </ol>	<ol style="list-style-type: none"> <li>1. Daily faculty-resident interaction in the operating room.</li> <li>2. Self evaluations.</li> <li>3. Monthly on-line faculty evaluations.</li> <li>4. Quarterly meeting with program director.</li> </ol>

<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 between the anesthesiologist and the surgeon, OR, ICU and PACU nurses.</li> <li>2. Learn techniques to decrease patient and patient family anxiety.</li> <li>3. Learn effective communication techniques during periods of stress in order to decrease patient and family anxiety.</li> <li>4. Demonstrate the ability to effectively communicate concerns with surgeons.</li> <li>5. To learn strategies and techniques for teaching medical students the principles of anesthesiology.</li> </ol>	<ol style="list-style-type: none"> <li>1. Modeling by the anesthesia faculty</li> <li>2. Interact with patients and their families.</li> <li>3. Discuss preanesthetic evaluation and plan with the supervising faculty and pertinent members of the health care team.</li> <li>4. Attend resident simulation.</li> <li>5. Experience teaching medical students in the operating room.</li> </ol>	<ol style="list-style-type: none"> <li>1. Daily faculty-resident interaction in the operating room.</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. Understand the legal and ethical issues involved in patient consent.</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> <li>9. Demonstrate a commitment to ongoing professional development.</li> <li>10. Learn how to discuss and record cases with complications and/or poor outcomes.</li> </ol>	<ol style="list-style-type: none"> <li>1. Modeling by the anesthesia 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-resident 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. Learn the cost of the drugs, monitoring equipment and overall procedures involved in surgical care.</li> <li>2. Understand how to do cost analysis for health care systems</li> <li>3. Understand the complex systems that form the foundation for care of patients suffering from various diseases.</li> <li>4. Learn how to effect improved operating room efficiency safely.</li> <li>5. Appreciate the complex interactions that go on between primary care teams, surgeons and anesthesiologist in the overall hospital management of these complex patients.</li> <li>6. Learn how to effectively use information management in the preoperative evaluation.</li> </ol>	<ol style="list-style-type: none"> <li>1. During their experience in the operating room, the trainees will 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-resident 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>

