660N NEONATOLOGY

This course does not fulfill the ICU requirement for UC Irvine students
This course is available to UC Irvine students only
All students must get prior approval for all CHOC based rotations.

Course Description: In this four-week elective, the student acts as an intern and takes charge of patients consistent with his or her ability to accept responsibility. This is an opportunity to learn newborn resuscitation, endotracheal intubation, respiratory care techniques, and all phases of acute and critical medicine of the newborn. It is a recommended clerkship for the senior student training in pediatrics, obstetrics/gynecology, surgery, and anesthesiology.

Department: Pediatrics

Prerequisites: UC Irvine students must have completed their basic science course work and third year Pediatrics clerkship.

Restrictions: UC Irvine Students only. All students must get prior approval for all CHOC based rotations.

Elective Director:

CHOC Based Rotation: Vijay Dhar, M.D.
Miller's Based Rotation: Jack Sills, M.D.

Instructing Faculty:

Course Website: None

Who/Location/When to Report to on the First Day:

CHOC Based Rotation: Please contact Pediatrics Elective Coordinator, pedselective@uci.edu (714) 456-5631 or (714) 456-8469, fax (714) 456-6660

Miller's Based Rotation: Please contact Pediatrics Elective Coordinator, pedselective@uci.edu (714) 456-5631 or (714) 456-8469, fax (714) 456-6660

Site Coordinator: Pediatrics Elective Coordinator, pedselective@uci.edu (714) 456-5631 or (714) 456-8469, fax (714) 456-6660

Site: CHOC

Periods Available: Throughout the year

Duration: 4 weeks

Number of Students: 1

Scheduling Coordinator: UC Irvine students please call (714) 456-8462 for a scheduling appointment.

Course Objectives: At the end of this rotation students will be able to:

- Assume a high level of patient care responsibility in preparation for residency (Di)
- Demonstrate improved clinical and procedural skills (Bvi)
- Demonstrate improved ability to manage complex, acutely ill patients (Bvi)
- Demonstrate ability to work as a team member (Ci)

Key Topics:

- Parenteral and enteral nutrition
- Parental genetics
- Neonatal pharmacology

4/1/2016
• Cardiac vs. Respiratory disease
• Neonatal shock
• Neonatal infections
• Neonatal ethics
• Developmental-sensitive care for growing preterm infants

**Competencies:**

• Independent management of newborn service
• Admission and stabilization
• Daily management
• Discharge planning

**Attitudes and Commitments:**

• Internship-like responsibilities, e.g., primary workup of new patients, writes orders, performs procedures, participates in daily care, takes night call, and writes notes.
• Assume a high level of patient care responsibility in preparation for residency.
• Strengthen their clinical and procedural skills
• Improve their ability to manage complex, acutely ill patients.
• Learn to work as a team member.

**Educational Activities:**

**Day 1 Orientation:**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 - 9:30</td>
<td>Board Rounds</td>
</tr>
<tr>
<td>9:30 - 11:30</td>
<td>Work Rounds</td>
</tr>
<tr>
<td>11:30 - 11:45</td>
<td>Meet with OT</td>
</tr>
<tr>
<td>11:45 - 12:00</td>
<td>Meet with Audiology</td>
</tr>
<tr>
<td>12:00 - 1:00</td>
<td>Noon Conference</td>
</tr>
<tr>
<td>1:15 - 1:45</td>
<td>Meet with Attending</td>
</tr>
<tr>
<td>1:45 - 2:00</td>
<td>Meet with Nursing</td>
</tr>
<tr>
<td>2:00 - 2:30</td>
<td>Meet with Pharmacy</td>
</tr>
<tr>
<td>2:30 - 4:30</td>
<td>Meet with Nutrition</td>
</tr>
<tr>
<td>4:30 - 4:45</td>
<td>Meet with Child Life</td>
</tr>
<tr>
<td>4:45 - 5:00</td>
<td>Meet with Case Manager</td>
</tr>
</tbody>
</table>

Daily work rounds
Weekly Pediatric Grand Rounds, Discharge planning rounds, Psychosocial rounds, Board rounds with NICU attendings and Perinatal service.
Daily sign-out rounds.
Monthly combined Perinatal - Neonatal rounds
Monthly Pathology rounds
Didactic neonatal topics 2-3 times weekly

**What Students Should do to Prepare for the Rotation:** Review NICU orientation packet. This can be obtained from the site coordinator if it has not been delivered to your mailbox or via email one week

4/1/2016
prior to beginning the rotation.

**Clinical Responsibilities of the Student:** Neonatal sub-intern

**Patient Care Responsibilities of the Student:** Neonatal sub-intern

**Call Schedule of the Student:** 4 night calls (1 per week)

**Procedures to be Learned by the Student:**

- Intubation
- Ventilator management (High frequency and conventional strategies)
- Line placement (Umbilical, peripheral IV, peripheral arterial)
- Arterial stick
- Lumbar puncture

**Percentage of Time Student will Participate in Ambulatory Setting:** None

**Standardized Instructional Material:**

- Orientation Packet
- Bedside NICU Patient Rounds
- Conference/Lecture/Small Group Sessions: Lectures are 1 hour in length and given by a neonatal attending on clinical service.
- Common respiratory disorders
- RDS
- PDA
- Newborn Sepsis
- Nutrition
- Delivery room scenarios
- Perinatal asphyxia
- Meconium aspiration
- Newborn ventilation

**Course Hours:** Weekly Summary

<table>
<thead>
<tr>
<th>Category</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Based</td>
<td>5.0</td>
</tr>
<tr>
<td>Computer Assisted Instruction</td>
<td>5.0</td>
</tr>
<tr>
<td>Conference</td>
<td>4.0</td>
</tr>
<tr>
<td>Grand rounds</td>
<td>1.0</td>
</tr>
<tr>
<td>Examinations</td>
<td>5.0</td>
</tr>
<tr>
<td>Inpatient</td>
<td>40.0</td>
</tr>
<tr>
<td>Laboratories</td>
<td>3.0</td>
</tr>
<tr>
<td>NICU Rounds</td>
<td>9.0</td>
</tr>
<tr>
<td>Other: reading, writing, journaling</td>
<td>0-4</td>
</tr>
<tr>
<td>Total</td>
<td>72.0</td>
</tr>
</tbody>
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**Content Theme Integration:**

- Communication skills
- Death & Dying

4/1/2016
• Decision Making
• Evidence Based Medicine
• Genetics & Genetics Counseling
• Health Care Systems
• Multicultural Medicine
• Technology Assessment
• Termination of Pregnancy
• Women's Health

Recommended Readings:

• Neonatology: Management, Procedures, On-Call Problems, Diseases, Drugs - Comella
• Care of the High-Risk Neonate - Fanaroff
• Fetal & Neonatal Physiology - Polin and Fox
• Neonatal Drug and Nutritional Manual - Zenk

Official Grading Policy: The standard UC Irvine elective evaluation form will be used to determine the final grade of a student. The students will be graded on a three part system Honors/Pass/Fail. Midcourse feedback will be provided to the students by the attendings. Each student will be observed and evaluated by: 1) Attending neonatology faculty, 2) Neonatal fellows, 3) Neonatal nurse practitioners, 4) NICU team members. If the student fails the elective a grade of "F" will be permanently recorded on his/her transcript. The student can repeat the course for a second grade, however, the "F" will not be removed from the transcript.