



THE UNIVERSITY OF BRITISH COLUMBIA

**Pediatric Critical Care Medicine
Postgraduate Training Program**

**ELECTIVE SPECIFIC COMPETENCIES FOR:
*NEONATOLOGY***

Terminal Competencies:

The competent pediatric critical care resident/fellow will demonstrate their ability to:

- Understand the process of obstetrical and antenatal decision making
- Resuscitate and stabilize sick newborns
- Care for the full-term and pre-term Level III (acutely sick) newborn

Enabling Competencies:

a) Knowledge

The Resident/Fellow will demonstrate knowledge concerning:

1. The “high-risk” pregnancy
2. Aspects of labor and delivery which affect the neonate.
3. Fetal growth, development and physiology including the role of the placenta.
4. Processes of neonatal transition to extrauterine life
5. Diagnosis, resuscitation, stabilization and care of the sick or at-risk newborn.
6. Pathological processes that affect the newborn.

b) Clinical Skills

The Resident/Fellow will demonstrate the following skills:

1. History taking and compilation of information from charts and other sources as needed to care for the perinatal patient (maternal past history, including gestational events, present gestation, social and environmental history, events of labour and delivery, etc).
2. Physical examination with special reference to accepted parameters of normality in terms of growth and development, assessment of gestational age, initial assessment of the newborn (Apgar), recognition of dysmorphism, etc.
3. Recognition of signs of distress and assessment of their severity, with emphasis on early intervention and prevention of complications.
4. Recognition of the subtle and non-specific signs of serious illness and of those that precede rapid deterioration in the newborn.
5. Recognition of conditions that predispose to sepsis, hypoglycemia, hypocalcemia, etc., and principles of safe management.

c) Technical Skills

The Resident/Fellow will become competent in clinical assessment and management of critically ill newborn infants including:

1. Techniques of resuscitation
2. Ventilatory support
3. Continuous monitoring
4. Temperature control
5. General principles of neonatal critical care, and specifically:
 - Umbilical vessel cannulation
 - Exchange transfusion
 - Application of phototherapy
 - In-Hospital transport of the sick newborn

d) Problems

The Resident/Fellow, making use of the above knowledge, skills and attitudes, will learn to suspect, identify, diagnose, manage and recognize when to refer newborns with problems, such as the following:

- Respiratory distress
- Cyanotic and non-cyanotic heart disease
- Sepsis and other congenital infections
- Jaundice
- Prematurity and the problems associated with it
- Hypoxic-ischemic encephalopathy, convulsions and other CNS problems

- Problems associated with infants of diabetic mothers
- Intrauterine growth retardation
- Necrotizing enterocolitis

Reviewed January 2013