



LOMA LINDA UNIVERSITY

MEDICAL CENTER

Staff Development

Title : Care of the Newborn Brain Symposium

Course Description: This one day symposium is designed for those who want to journey into the brain of the neonate.

Course Purpose and/or Objectives: We will investigate seizures, therapeutic hypothermia, neuroprotection, and more exciting new science of neurocritical care and brain monitoring, using amplitude EEG and Near-Infrared Spectroscopy. These innovative advances allow us to treat and even prevent neurological impairments for some babies.

Course Content/Outline:

- Describe the challenges in accurate diagnosis of neonatal seizures
- Identify which groups of neonates are at highest risk for seizures
- Describe challenges to forming secure parent-infant attachments in the NICU and how it affects brain development in all babies
- Demonstrate graded sensory input, contingent on infant's neurobehavioral responses
- Evaluate infant specific positioning needs based on age, diagnosis and neurobehavioral presentation of infant
- Provide an overview of the anti-seizure medications used in the NICU, their mechanism of action, potential interactions with other medications and long-term outcome data
- Review normal neonatal neuroanatomy
- Discuss common neonatal neuropathology using interactive case presentations
- Describe the indications and prognostic value of neuromonitoring with EEG, aEEG, and NIRS and neuro-imaging with cranial ultrasound and MRI during the neonatal period, and when applicable in early childhood
- Discuss the biologic rationale for therapeutic hypothermia to treat hypoxic-ischemic encephalopathy
- Describe screening, eligibility criteria, adjuvant therapy, and evaluation for therapeutic hypothermia
- Determine when to call the cooling center for possible transfer and initiation of cooling measures
- Review possible side-effects associated with body cooling
- Elaborate on the indications for surgical interventions for neonatal IVH
- Discuss the morbidity and outcomes of high grade neonatal IVH
- Explain the basis for and limitations of aEEG monitoring
- Name the 5 background patterns for aEEG and their classification a normal vs. abnormal
- Describe the neurodevelopmental (ND) & neurobehavioral problems in patients with congenital heart disease (CHD)

- Describe school performance problems in childhood and adolescence
- Discuss the goals of care over the life-span of persons with neurodevelopmental impairment
- Discuss the wide spectrum of developmental trajectories amongst persons with neurodevelopmental impairment
- Discuss how the experience in the Neonatal Intensive Care Unit influences the trajectory and the narrative of a family affected by neurodevelopmental impairment

Course Completion Requirements:

Successful completion is defined as:

1. Attendance at each presentation and participant may not miss more than ten minutes of any presentation.
2. Provision of enrollment/CE information.
3. Complete program/speaker evaluation forms and return at the conclusion of the course.
4. Complete and return posttest at the conclusion of the course if applicable.

Continuing Education Credits:

Upon successful completion, the participant will be awarded 7 contact hours of continuing education credit.

- *Loma Linda University Medical Center, Staff Development is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation (ANCC).*
- *Loma Linda University Medical Center Office of Staff Development is approved by the American Psychological Association to sponsor continuing education for psychologists. LLUMC Office of Staff Development maintains responsibility for this program and its contents. This event meets the qualifications for 7 hours of continuing education credit for psychologists as required by the American Psychological Association.*
- *Loma Linda University Medical Center, Staff Development is a Provider approved by the California Board of Registered Nursing, Provider Number 00239, this program is approved for 7 contact hours.*
- *Loma Linda University Medical Center, Staff Development provider #180 is accredited by the California Accreditation of Pharmacy Education (CAPE) as a recognized provider of continuing pharmacy education. Pharmacists completing this course prior to 09/28/2019 may receive 7 credits.*
- *Loma Linda University Medical Center, Staff Development is recognized as a Continuing Competency Approving Agency by the Physical Therapy Board of California. This program is approved for 7CE credits.*
- *This course meets the qualifications for 7 hours of continuing professional development credit for Speech-Language Pathologists as required by the California Speech-Language Pathology and Audiology Board, provider #PDP42.*
- *Occupational Therapist reciprocate with provider #PDP42.*
- *Respiratory Therapists reciprocate with provider #00239.*
- *Behavioral Health Professionals reciprocate with APA.*

- *Loma Linda University School of Public Health is a designated provider of Category I continuing education contract hours for health education by the National Commission for Health Education Credentialing, Inc. The NCHEC Multiple Event Provider (MEP) number is 105816. This event will be available for 7 (CHES & MCHES) credit hours.*

Continuing Education / Proof of Completion Certificates

Upon completion of the course, participants may print continuing education / proof of completion certificates via the **LLU CE Portal**. This will be the only source for acquiring your certificate. Please allow up to 2 weeks after the last day of the course for the CE certificates to be available.

Certificate Printing Instructions:

Non-Employees:

Go to <https://ce.llu.edu>

Click **Login**

Enter the email address and password you used to register for the event.

(If you've forgotten your password or this is your first time logging in, click **Forgot My Password**, enter your email address, and your password will be emailed to you.)

Then click **Certificates**

Click **Print Certificate** next to the course title.

When you are done, **Logout**

LLUH Employees:

Go to <https://ce.llu.edu>

Click **Login**

Enter your work email address and CE Portal password. This password is not the same as your work login password unless you have manually updated it.

(If you've forgotten your password or this is your first time logging in: click **Forgot My Password**, enter your work email address, and your password will be emailed to you.)

Then click **Certificates**

Click **Print Certificate** next to the course title.

When you are done, **Logout**

Conflict of Interest or lack thereof:

The planning committee, coordinator and presenters of this class have no financial relationship in the material presented.

Commercial Support:

There is no commercial support related to this educational class.

Non-endorsement of product(s):

Please be advised that accredited status does not imply endorsement of any commercial products displayed in conjunction with this class by either the Loma Linda University Medical Center or ANCC.

Planning Committee:

Name and Educational Credentials	Position	Agency	Area of Expertise
Helen Staples-Evans RN, MS, CNA	Executive Director, Staff Development	LLUMC	ANCC, BRN, Leadership
Monica McKenzie,	Perinatal Educator,	LLUMC	Staff Development

DrPH, RN, MCHES, CLE	Staff Development		
Priscilla Pegis, RN, BSN	Neuro NICU Coordinator	LLUCH	Neonatal, Transport
Ja-Yee Ann Chu, DNP, MS, RN, PHN, CNS- Pediatrics	Clinical Educator, NICU	LLUCH	Neonatal, Pediatrics
Loren Neiswender, MSN, RN, PHN, PMHNP-Lifespan	Manager, NICU	LLUCH	Neonatal, Psychiatric

Course Coordinator:

Priscilla Pegis, RN, BSN
Neuro NICU Coordinator, LLUCH, NICU

Ja-Yee Ann Chu, DNP, MS, RN, PHN, CNS
Clinical Educator, LLUCH, NICU