## **NICU Studies**

## KNIRS (PI: Matt Harer) Study type: Prospective observational clinical trial Setting: Meriter NICU Population: < 32 week preterm neonates, < 4 days of age at start of monitoring Funding: Wisconsin Partnership Program and ICTR KL2 Scholar Objective: Validation of renal NIRS monitoring in preterm neonates Happy Baby Hearts (PI: Matt Harer) Study type: Prospective observational clinical trial Setting: Meriter Nursery, NICU & AFCH NICU, PICU Population: Neonates identified as at risk for coarctation of the aorta prenatally Funding: Meriter Foundation Grant Objective: Evaluate feasibility of renal NIRS monitoring in nursery as well as changes in renal oxygenation in patients at risk of coarctation of the aorta Baby Brain Recovery Study (PI: Bernadette Gillick, Medical Monitor: Ryan McAdams) Study type: longitudinal observational study Setting: Waisman Center (recruitment at AFCH, Meriter NICU, community) Population: Infants with acute unilateral or bilateral brain lesions ((Eg. Stroke, ICH, PVL), CGA between term and 6 months Funding: NIH Grant Objective: To map functional integrity and excitability of the cortical spinal tract (CSTs), To map the structural integrity and connectivity of the CSTs Healthy Little Eyes (PIs: Pelin Cengiz, Ryan McAdams, Maria Stanley, Bikash Pattnaik) Study type: Longitudinal (retrospective & prospective) observational clinical trial Setting: Meriter NICU, AFCH NICU, AFCH & Waisman Newborn Follow Up Clinic Population: Infants with HIE, <78 hours of age Funding: ICTR Grant, Meriter Foundation Grant Objective: Evaluate if early visual function findings will correlate with the neurodevelopmental and neuroimaging outcomes in children who sustain HIE AERO-05 (PI: Dinushan Kaluarachchi)

Study type: Double blinded clinical trial

Setting: Meriter NICU and 10+ sites

Population: Infants 29 0/7 to 36 6/7 weeks with a clinical diagnosis of RDS, <6 hours of age Funding: Industry sponsored

Objective: Assess the effectiveness of a single dose of Infasurf administered through the InfasurfAero in preventing CPAP failure. Assess the safety of Infasurf administered through the InfasurfAero in reducing the rates of adverse events associated with intubation and/ or invasive SRT.

## **NICU Studies**

PEAPOD (PI: Whitley Hulse)

Study type: Prospective Cohort Study

Setting: Meriter NICU

Population: Neonates born at ≤ 32 weeks gestational age

Objective: To evaluate if increased cumulative fat and energy intake in the first 2 weeks will improve fat-free mass as a marker for brain growth.

Lung POCUS to Predict Extubation Success (PI: Adam Bauer, Ann Chacko)

Study type: Prospective trial

Setting: Meriter NICU

Population: All intubated babies (excl major anomaly)

Objective: Determine if lung POCUS can predict extubation success