

**Faculty Name:** Echezona Maduekwe

**Academic Title:** Associate Professor of Clinical Pediatrics

**Medical School:** College of Medicine and Surgery, University of Nigeria, Enugu

**Residency:** Bronx-Lebanon Hospital Center, NY

**Fellowship:** Golisano Children's Hospital, University of Rochester, NY

**Interests:** Dr. Maduekwe's research interests focus on general newborn care, prematurity, reduction of morbidity and mortality, especially those related to hypoxic injury in newborns – An NIH T32 grant recipient at University of Rochester NY for the effect of Cumulative Neonatal Oxygen Exposure in Adult Mice Infected with Influenza A Virus. His work included development of guideline for whole body cooling and vEEG during hypothermia therapy of neonates with hypoxic ischemic injury. He is also the Stony Brook site Principal Investigator of a multicenter phase II drug trial:

- *A phase II multicenter, single dose randomized double blind, placebo controlled, parallel group study evaluating the safety and efficacy of 2 doses of stannosoprfin in combination with phototherapy in neonates (64,185-204).*
- *A four year blinded outcomes, follow up study of patients who received stannosoprfin or placebo in clinical trial 64,185-204.*

**Research Project Titles (include last 5 years):**

1. *Umbilical cord blood as an alternative to late preterm admission complete blood count*
2. *Predicting the insertion depth of endotracheal tube in neonate using body Landmarks*
3. *Reliability of oxi-pneumogram in the diagnosis of gastroesophageal reflux disease in preterm infants*
4. *Hypoglycemia risk score: A valuable clinical tool for assessing the need of dextrose infusion requirements in the management of hypoglycemia in infants of gestational diabetic mothers*
5. *The Accuracy of Ultrasound Estimated Fetal Weight Percentile on Modified Fenton Curve for Birth Weight Estimation and Drug-dosing in Preterm Infants*
6. *Optimizing seizure management & Reduction of phenobarbital use during therapeutic hypothermia in neonatal encephalopathy*
7. *Effect of Neonatal Hypermagnesemia on the timing for first enteral feeds*

**Publications (also include last 5 years):**

1. **Maduekwe ET**, Buczynski BW, Yee M, Rangasamy T, Stevens TP, Lawrence BP, O'Reilly MA. *Cumulative Neonatal Oxygen Exposure Predicts Response of Adult Mice Infected with Influenza A Virus. Pediatric Pulmonology 2014; 23063.doi:10.1002/ppul 23063. PMID: 24850805.*
2. Karber B, Omesi L, Chang S, Handel A, Hegedus M, **Maduekwe E.**, *A Case of Congenital Malignant Spinal Cord Glioma as a Cause of Congenital Ascites in a Neonate. Case Reports in Pediatrics 2016; 5208753.doi:10.1155/2016/5208753. PMID: 27597917.*
3. Prakash N, Decristofaro J, **Maduekwe ET.** *One less Painful Procedure: Using Umbilical Cord Blood as Alternative Source to Admission Complete Blood Count. American Journal of Perinatology 2017; 12: 1178-1184. PMID: 28395365.*
4. **Maduekwe E**, Decristofaro J. *Adjunctive Therapy in Bronchopulmonary Dysplasia. NeoReviews 2017; 18: e173-e179. doi: 10.1542/neo.18-3-e173.*
5. Lee D, Mele P, Hou W, Decristofaro J, **Maduekwe E.** *The Oro-helical Length Accurately Predicts Endotracheal Tube Insertion Depths in Neonates. Journal of Pediatrics, PMID: 29803303.*

**Book chapter**

**Maduekwe E.** *Chapter: Embryology and Physiology, Avery's Neonatology Board Review: Certification and Clinical Refresher. Elsevier Health Sciences March 2019: Patricia R. Chess (Editor).*