Biosketch – ANDREW UNGER, M.D.

NAME	POSITION TITLE
Andrew Unger, M.D.	Attending Neonatologist, Hackensack Meridian Health System
eRA COMMONS USER NAME UNGERA1	Partner, Chief Medical Advisor, NEATCap Medical, LLC

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	MM/YY	FIELD OF STUDY
Columbia University, New York, NY	B.A.	05/75	Chemistry
University of California, Los Angeles, CA	M.D.	06/80	Medicine
Arizona Health Sciences Center, Tucson, AZ	Intern	06/81	Pediatrics
Arizona Health Sciences Center, Tucson, AZ	Resident	06/83	Pediatrics
University of California Davis, Sacramento, CA	Fellow	06/86	Div. of Neonatology

A. Personal Statement

Dr. Unger is a board-certified neonatologist with expertise in clinical trial processes – particularly Informed Consent - having chaired St. Luke's University Health Network's Institutional Review Board from 1998 to 2012. He currently is in active clinical practice in New Jersey.

As Medical Director of the St. Luke's Hospital and Health Network's NICU(s) from their founding in 1986 until 2012, Dr. Unger actively participated in many multi-center clinical trials via Vermont-Oxford Network protocols including pivotal surfactant, NO, post-natal steroid for Chronic Lung Disease, and Therapeutic Hypothermia for Hypoxic-Ischemic Encephalopathy trials, as well as industry-funded research on bowel-flora diversity in human-milk - as opposed to formula-fed premature infants. He is keenly aware of the influence of adverse environmental exposure on the development of premature and term neonates. In addition to his work on NICU noise protection, Dr Unger is currently collaborating with other researchers to adapt current newborn metabolic screening procedures for simultaneous assay of heavy metals from dried blood spots.

During over a quarter of a century as a NICU Medical Director, Dr. Unger has supervised the care of more than 10,000 of the Lehigh Valley area's sickest neonates, and, thus, has hands-on experience both with time-tested and novel treatment modalities. He has given many Grand Rounds, and lectured Pediatric Residents for over 30 years at local and at national meetings. Of note, during his tenure as a NICU Medical Director in a non-academic hospital environment, Dr. Unger's strong emphasis was on keeping sick babies alive, rather than focusing on publications.

As Partner, and Chief Medical Advisor to, NEATCap Medical, LLC, Dr. Unger evaluates NEATCap's product designs, and helps ensure that the products will be investigated safely and efficiently – providing actionable data on practical use and potential efficacy.

B. Medical Positions and Honors

Full-time Clinical Responsibilities

1983 – 1984 Pediatric Associate, Yuma Pediatrics Ltd., Yuma, Arizona

1986-2012 Medical Director, Neonatal Intensive Care Unit(s)
St. Luke's Hospital and Health Network, Department of Pediatrics
801 Ostrum Street, Bethlehem, Pennsylvania 18015

1988-2012 Director, St. Luke's Infant A.L.T.E./ Sleep Apnea Clinic
1988-2005 Director St. Luke's Pediatric HIV Clinic

2013 – 2018 Chief of Pediatrics
Sacred Heart Hospital
Allentown, PA

2019-Present Clinical Practice of Pediatrics and Neonatology at various sites in PA and NJ

Certifications

1986-2017	American Board of Pediatrics (Cert 1/19/1986)
1986-2017	American Board of Pediatrics-Neonatal-Perinatal Medicine (Cert 10/23/1987)
2007-2017	American Board of Pediatrics – Sleep Medicine (Cert 11/15/2007)
2015-2022	MOC ABP (Cert 11/1/2015)
1990-2012	AHA Neonatal Resuscitation Instructor
2012-2017	AHA NRP Provider (Cert 02/2022)

Professional Activities

1998-2012	Chairman, Institutional Review Board, St. Luke's Hospital and Health Network
2002-2010	Perinatal Ethics Consultation Committee, St. Luke's Hospital and Health Network
1998-2011	Neonatal/Perinatal Risk Reduction Committee, St. Luke's Hospital and Health Network
2000-2015	Technical Advisory Board, Newborn Metabolic Screening, PA Department of Health

Honors

1973-1975	Phi Beta Kappa Honor Society
1975	Summa Cum Laude – B.A. Degree
1979	Pediatric Clerkship – Honors, University of California, Los Angeles

C. Selected Peer-reviewed Publications

Manuscripts

1. Unger, A., Tapia, L., Minnich, L.L. & George, R. C. (1982). Atypical neonatal respiratory syncytial virus infection. Journal of Pediatrics, 100, 762-764. PMCID: PMC1751022
2. Unger, A. & Goetzman, B.W. (1986). Nutritional Practices and Outcome of Extremely Premature Infants. American Journal of Diseases of Children, 140,1027-1033.
3. Unger, A., Rhenman, B., Fuller, J.K. & Lightner, E.S. (1993). Post-Operative Metabolic Alkalosis in a Neonate: Treatment with Hydrochloric Acid Infusion. Clinical Pediatrics, 24, 444-446.

Abstracts

1. Unger, A. & Goetzman, B.W. (1985). Sepsis is a major factor in late mortality of very, very low birthweight infants. Clinical Research, 33, 144A.
2. Unger, A. & Goetzman, B.W. (1985). Sepsis is a major factor in late mortality of very, very low birthweight infants. Pediatric Research, 19, 368A.
3. Unger, A., Chan, C. & Goetzman, B.W. (1986). Eat to live: Enteral vs. parenteral nutrition and the sub-acute mortality and morbidity of very, very low birthweight (VVLBW) infants. Clinical Research, 34, 149A.
4. Unger, A., Chan, C. & Goetzman, B.W. (1986). Nosocomial infection in very, very low birthweight infants (VVLBW) effects of route of administration of parenteral nutrition (PN) and timing of pathogen-specific antibiotic therapy. Clinical Research, 34,133A.
5. Unger, A., Goetzman, B.W., Chan, C., Lyons, A. & Miller, M.F. (1986). Parenteral nutrition: Toxic to the very, very low birthweight infant? Pediatric Research, 20 (Part 2), 1555A.
6. Unger, A., Vogel, J. & Arcona, S. (1999). Proposed guidelines for asymptomatic infants found to have prolonged QTc on electrocardiography. American Academy of Pediatrics Neonatal Meeting, Washington, DC.

Patents

1. Wittmann-Price, R., Unger, A., Thear, G. H., Thear, E.G., inventors; Neatcap, LLC assignee, Sensory Development Cap. United States patent US Pat. 7,878,968, Feb. 1, 2011.
2. Kimock, F.M., Rambo, Z., Kimock, B.J., Unger, A., Thear, E.G., Thear, G.H., inventors; Neatcap, LLC assignee. Medical Headgear. United States patent US Pat. 10,413,696, Sept. 17, 2019.
3. Funk, W.E., McDade, T, Unger, A. Minimally-Invasive Collection System for Collecting Biological Samples for Quantifying Heavy Metals, Other Toxicants, Pathogens, and Biomarkers. US provisional patent application US Pat. Appl. 62/340261. Submitted 2016.