

Dr. Terrie Inder, MD Director, Center for Neonatal Research

Dr. Terrie Inder is dual trained in neonatology and child neurology and provides comprehensive care for critically ill premature and full-term infants, particularly those with neurological conditions, at Children's Hospital of Orange County (CHOC) located in Southern California.

Dr. Inder's research focus is on the newborn brain. Her primary research is targeted at understanding the timing, mechanisms and impact of cerebral injury and altered cerebral development in infants at high risk for adverse neurodevelopmental outcome, including

the prematurely born infant, the sick term-born infant and the infant with congenital heart disease.

Her goal in her research is to investigate means of accurate, early diagnosis of brain injury as well as developing treatments and preventive strategies to reduce subsequent disabilities. This research work has utilized technologies including near infrared spectroscopy, electroencephalography and magnetic resonance imaging.

Dr. Inder is the Director of the Center for Neonatal Research at CHOC, and she has held previous leadership positions in neonatal medicine as Director of the Intellectual and Developmental Disabilities Research Center at Washington University in St. Louis, Chair of the Department of Pediatric Newborn Medicine at the Brigham and Women's Hospital in Boston and was a Mary Ellen Avery Professor of Pediatrics in the field of Newborn Medicine at Harvard Medical School. Her mission has been to develop programs that integrate discovery and innovation alongside translation into clinical excellence while mentoring the next generation of academic clinicians.

Peter Anderson, PhD



Dr. Anderson is a trained psychologist with an expertise in Pediatric Neuropsychology. His interest is in the development of cognitive skills from infancy through adulthood, and how the cognitive development is aligned with the maturation of brain structures and networks. His research focus is on children who have experienced an insult to the brain early in development, and how this insult alters subsequent brain and cognitive development.

He has been able to demonstrate how children born pre-term are at-risk for impairments across all developmental domains. Through his research, he has shown that early injury seen on brain imaging is predictive of later neurodevelopmental challenges, and that parenting and social-environmental factors can have significant positive effects on developmental outcomes. He has also shown the benefits of early intervention for high-risk infants and is currently designing a novel surveillance program for high-risk children that is tailored to their individual needs. Dr. Anderson has influenced clinical practice in newborn medicine by contributing to some of the most impactful clinical trials in newborn medicine including caffeine for apnea of prematurity, antenatal magnesium sulphate to reduce cerebral palsy, repeat administration of antenatal steroids, and postnatal nutritional strategies.

Dr. Anderson has recently joined the Department of Pediatrics at the School of Medicine, UC Irvine, as well as the Center for Neonatal Research at CHOC. He will use his experience in designing and implementing world-class observational studies and clinical trials to mentor and support colleagues at CHOC to achieve their research ambitions. Previously, Dr. Anderson was Director of the Neurodevelopmental Research Program, Director of Grants, Fellowship and Mentorship, and Professor of Paediatric Neuropsychology at the School of Psychological Sciences at Monash University, Melbourne. He has also had appointments at the Murdoch Children's Research Institute, based at Melbourne's Royal Children's Hospital, where he has been Director of the Victorian Infant Brain Studies group for nearly 20 years.