

Barbara Schmidt, MD, MSc, CM (Member of the Order of Canada)

I am a neonatologist and clinical epidemiologist who conducted several clinical research studies that were designed to improve the practice of Evidence-Based Neonatal Medicine. My most important research projects were the following international neonatal randomized trials:

- Caffeine for Apnea of Prematurity (CAP) Trial
- Trial of Indomethacin Prophylaxis in Preterms (TIPP)
- Canadian Oxygen Trial (COT)

The **CAP trial** has received a lot of attention, interest and praise since the first results were published 12 years ago. In 2008, this trial was selected for the **Inaugural Trial of the Year Award in 2008 by the Society for Clinical Trials and Project Impact**. Over 2000 infants with very low birth weights were enrolled. Long-term follow up included assessments at 18 months, 5 and 11 years.

TIPP was the first international trial I designed with my colleagues at McMaster University. After this trial was launched in Canada and in Australia, the Neonatal Research Network of the NICHD joined this collaborative research effort. TIPP contributes almost 90% of the available data from randomized trials on the longer-term outcomes of infants exposed to prophylactic therapy with indomethacin.

COT was one of 5 large randomized trials that compared two pulse oximeter saturation target ranges in very immature infants. An individual participant data meta-analysis of all 5 trials was published last year in JAMA. In addition to the main trial report and this meta-analysis, I have published several ancillary manuscripts with my collaborators including an analysis of the association between cumulative episodes of intermittent hypoxemia and bradycardia during the stay in the neonatal ICU and adverse long-term outcomes.

After my move to Philadelphia, I have been the center PI for the University of Pennsylvania and Children's Hospital of Philadelphia in the NICHD Neonatal Research Network (NRN) from 2011 until my retirement.

Lastly, I have been the clinical research mentor and supervisor for more than a dozen neonatal fellows and young faculty. Most of these individuals have become very productive clinician scientists. Examples include Peter Davis in Melbourne, Australia, Dirk Bassler in Zurich, Switzerland, John Zupancic at Harvard Medical School, and more recently, Sara DeMauro, Elizabeth Foglia and Erik Jensen at the University of Pennsylvania and Children's Hospital of Philadelphia.