

Dr. McEvoy is a physician scientist with a long-term research goal to advance the understanding and treatment of the fetal origins of neonatal and infant lung disease. She is accomplishing this goal by conducting clinical and translational projects that incorporate the use of newborn and infant pulmonary function tests (PFTs). She has conducted a number of randomized clinical trials examining the impact of different regimes of antenatal and postnatal steroids on newborn pulmonary function and bronchopulmonary dysplasia (BPD). She recently completed a randomized trial demonstrating that daily supplemental vitamin C given to pregnant smokers improved their newborn's PFTs and decreased the incidence of wheezing through one year of age. This improvement was influenced by nicotine receptor polymorphisms. With her current R01 funding (www.vcsip.org), she is collaborating with Indiana University to measure forced expiratory flows in infants born to pregnant smokers randomized to vitamin C versus placebo and with the Oregon National Primate Research Center to investigate the mechanism of action of vitamin C in the face of in-utero smoke exposure.

Dr. McEvoy is also interested in the impact of late preterm delivery, extended duration of continuous positive airway pressure, and the impact of maternal obesity on infant respiratory disease and PFTs. She is collaborating with Dr. Kelvin MacDonald to investigate the effect of maternal diet and obesity on PFTs in a murine model and working with Dr. Peta Grigsby in a primate model of antenatal *Ureaplasma* colonization. These projects reach across many campuses in the Pacific Northwest including the Oregon National Primate Research Center, the Kaiser Research Center, and Obstetric clinics in both Portland, Oregon and Vancouver, Washington. Dr. McEvoy is also a member of an International Collaborative Study Group conducting an individual patient data (IPD) meta-analysis on repeat dosing of antenatal steroids and recently served on a NIH task force on the primary prevention of BPD.