Primary esophageal atresia repair is associated with periods of severe intraoperative metabolic derangements, with both the open and thoracoscopic surgical approach. (this thesis)

Despite the off-label use in children and sparse evidence of dexmedetomidine, many anaesthesiologists in Europe, USA and Australia prescribe dexmedetomidine to children for premedication, procedural sedation, ICU sedation and anaesthesia. (this thesis)

Current neuromonitoring techniques are not specific enough and will not gain understanding of the altered neonatal pathophysiology during surgery and anesthesia. (this thesis)

Children born with esophageal atresia show impairments in both motor function and cognitive performance at school age. Multidisciplinary long-term follow-up programmes and research are important to improve patient outcome and surgical and anesthesiologic techniques. (this thesis)

Multiple anesthetics are administered for a variety of procedures related to esophageal atresia repair, complications and comorbidities during the first 12 years of life. The repeated hospital admissions and interventions could have great impact on both the patient and their families. (this thesis)

Standardization of health care will lead to improved treatment and long-term outcome.

The potential for anesthetic neurotoxicity in the neonate, young infant, and fetus is the most pressing question facing the field of pediatric and fetal anesthesia (Boney O. et al, BMJ Open, 2015).

No country alone has the knowledge and capacity to treat all rare and complex diseases. (European Reference Networks)

A nature view in a hospital room may help decrease patients’ anxiety, distress and pain. (Ulrich RS et al, Herd. 2008;1(3):61-125)

Multidisciplinary research does not mean leaving behind your own skills – it means heading in new scientific directions using your own specialties. (Leeming, NatureJobs 2017)

Life is like riding a bike.