



**Professor Daqing MA**

(Jointly appointed by Imperial College and Zhejiang University)

- Tenured Professor of Anaesthesia, Imperial College London
- Qiushi Chair Professor, Zhejiang University
- Executive Dean of College of Pediatrics, Zhejiang University School of Medicine
- Fellow of Royal College of Anaesthetists (FRCA)
- Member of Academia Europaea (MAE)

He has more than 400 publications (H index 86; Total citations more than 26,000) of peer reviewed articles in English covering research fields of Anesthesiology, Pharmacology, Neuroscience, Neurology and Nephrology, and five international patents. His main research interests are organoprotection including kidney transplant, postoperative cognitive dysfunction, Cancer and Pain. His impactful research contributions are: 1) Professor Ma pioneered research into the brain- and kidney-protective properties of the noble gases, xenon and argon, and has maintained his world-renowned status in that field. His seminal findings provided the foundation for clinical trials addressing the role of xenon for acute ongoing neurological injury in both neonates (hypoxia-ischaemia encephalopathy) and adults (post-cardiac arrest syndrome). Based upon his research into the molecular mechanisms for the cytoprotective actions of xenon and argon, the use of these gases by competitive athletes are now prohibited by the World Anti-Doping Agency (WADA). 2) His scholarly activities have also extended to oncology, where he was the first to discover that general anaesthetics that are used for cancer surgery can modulate cancer cell behaviour through the elaboration of hypoxia-inducible factor 1-alpha (HIF-1 $\alpha$ ) which has led to change clinical practice to use intravenous anaesthesia to reduce cancer re-occurrence risk after surgery. 3) He has also led investigations in the mechanisms for neurocognitive disorders after surgery in the elderly that culminated in a large RCT demonstrating the efficacy and safety of a peri-operative interventional strategy. Now this strategy as a routine regimen has been used clinically worldwide to prevent and treat postoperative delirium. Professor Ma's research has been supported with the grants from MRC, NIHR, Alzheimer's Society-Bupa Foundation, BJA/RCoA, AAGBI, Westminster Medical School Research Trust, Action Medical Research and SPARKS, UK, European Society of Anesthesiology and EU COST Action, Brussels.