

**Professor Daniel Stuart Martin OBE**

BSc, MBChB, FRCA, FFICM, PhD

**Professor of Perioperative and Intensive Care Medicine:** Peninsula Medical School, University of Plymouth, John Bull Building, Derriford, Plymouth, PL6 8BU, UK.**Intensive Care Consultant:** Intensive Care Unit, Royal Free Hospital, Pond Street, London, NW3 2QG.**GCP Training:** last completed May 2020**Qualifications**

2013: PhD in Applied Physiology. University College London

2011: Fellow of the Faculty of Intensive Care Medicine

2011: Certificate of Completion of Training in Anaesthesia and Intensive Care Medicine *5<sup>th</sup> Feb 2011*

2004: Fellowship of the Royal College of Anaesthetists, London

1997: MBChB, University of Leicester

1994: BSc (1<sup>st</sup> class) Molecular Biology. University of Leicester**Present roles:**

- Bernard Johnson Adviser Academic Anaesthesia, Royal College of Anaesthetists
- Deputy Lead (Training) role with the NIHR CRN Anaesthesia, Perioperative Medicine and Pain Management Specialty Group
- Academic Training Coordinator, National Institute for Academic Anaesthesia
- Editor in Chief, Journal of the Intensive Care Society
- Deputy theme lead, Royal Free Hospital Research and Development
- Director, UCL Centre for Altitude, Space and Extreme Environment Medicine

**Selected recent publications:**

1. McKenna HT, Murray AJ, **Martin DS**. Human adaptation to hypoxia in critical illness J Appl Physiol 2020. Aug 27.
2. Cumpstey AF, Oldman AH, Smith AF, **Martin D**, Grocott MPW. Oxygen targets in the intensive care unit during mechanical ventilation for acute respiratory distress syndrome: a rapid review. Cochrane Database of Systematic Reviews 2020, Issue 9. Art. No.: CD013708.
3. Post B, Palmer E, Harris S, Singer M, **Martin D**. Oxygenation of the critically ill in selected intensive care units in the UK: are we usual? Br J Anaesth. 2020 Jul 17;S0007-0912(20)30493-1.
4. **Martin D** et al. The cardiac output optimisation following liver transplant (COLT) trial: a feasibility randomised controlled trial. HPB (Oxford). 2019 Dec 21;S1365-182X(19)33210-1
5. Stevens J, Feelisch M, **Martin D**. Perioperative oxidative stress: the unseen enemy. *Anesth Analg*. 2019
6. **Martin D**, Grocott M, Bellomo R. Oxygenation targets in acutely ill patients: still a matter of debate. Lancet. 2018 Dec 8;392(10163):2436
7. **Martin DS**, et al. Protocol for a feasibility randomised controlled trial of targeted oxygen therapy in mechanically ventilated critically ill patients. *BMJ Open*. 2019 Jan 17;9(1)
8. Martin G... **Martin D** et al. Perioperative Quality Initiative (POQI) consensus statement on fundamental concepts in perioperative fluid management: fluid responsiveness and venous capacitance. *Perioper Med (Lond)*. 2020 Apr 21;9:12.
9. Morkane CM, McKenna HM, Cumpstey AF, Oldman AH, Grocott MPW, **Martin DS**. Intraoperative oxygenation in adult patients undergoing surgery (iOPS): a retrospective observational study across 29 UK hospitals. *Perioperative Medicine* 20187:17
10. Flower L and **Martin D**. Management of hypoxaemia in the critically ill patient. Br J Hosp Med (Lond). 2020 Jan 2;81(1):1-10.
11. O'Brien KA, Atkinson RA, Richardson L, Koulman A, Murray AJ, Harridge SDR, **Martin DS**, Levett DZH, Mitchell K, Mythen MG, Montgomery HE, Grocott MPW, Griffin JL, Edwards LM. Metabolomic and lipidomic plasma profile changes in human participants ascending to Everest Base Camp. Sci Rep. 2019 Feb 19;9(1):2297.
12. **Martin D**, Peters MJ. Might children rust? What are the risks of supplemental oxygen in acute illness. Arch Dis Child. 2019 Feb;104(2):106-107
13. McKenna H, van der Horst Gijsbertus TJ, Reiss I and **Martin DS**. Clinical chronobiology: a timely consideration in critical care medicine. *Crit Care*. 2018; 22: 124.
14. Murray AJ, Montgomery HE, Feelisch M, Grocott MPW, **Martin DS**. Metabolic adjustment to high-altitude hypoxia: from genetic signals to physiological implications. *Biochem Soc Trans*. 2018 Jun 19;46(3):599-607
15. Hennis P, Mitchell K, Gilbert-Kawai E, Bountziouka V, Wade A, Feelisch M, Grocott M and **Martin D**. Effects of dietary nitrate supplementation on symptoms of acute mountain sickness and basic

physiological responses in a group of male adolescents during ascent to Mount Everest Base Camp. Nitric Oxide 60 (2016) 24-31

16. Gilbert-Kawai E, Coppel J, Hennis P, Grocott M, Ince, **Martin D**. Changes in labial capillary density on ascent to and descent from high altitude. F1000Research 2016, **5**:2107
17. Gassmann N, Elteren H, Goos T, Morales C, Rivera M, **Martin D**, et al. Pregnancy at high altitude in the Andes leads to increased total vessel density in healthy newborns. Journal of Applied Physiology 2016 Vol. 121 no. 3, 709-715
18. **Martin D**, McKenna H, Livina V. The human physiological impact of global deoxygenation. J Physiol Sci. 2017 Jan;67(1):97-106
19. Thiele R, Raghunathan K, Brudney C, LoboD, **Martin D**, Senagore A, Cannesson M, Joo Gan T, Mythen M, Shaw A, Miller T and For the Perioperative Quality Initiative (POQI) I Workgroup. American Society for Enhanced Recovery (ASER) and Perioperative Quality Initiative (POQI) joint consensus statement on perioperative fluid management within an enhanced recovery pathway for colorectal surgery. Perioperative Medicine (2016) 5:24
20. Lambden S, **Martin D**, Vanezis K, Lee B, Tomlinson J, Piper S, Boruc O, Mythen M, Leiper J.

#### **Selected recent grants:**

- 2020: Lead applicant: UCLH BRC / Rosetrees Trust Pump priming funding award. The influence of exercise on fitness, metabolism and heart function around the time of obesity surgery. £34,113.67
- 2020: Lead applicant: Commercial award from Siemens Healthcare Limited. Post market clinical study of a point of care COVID-19 IgG-IgM rapid test in healthy volunteers. £70,376.54
- 2020: Lead applicant: NIHR HTA award 19/109 - NIHR130508: Evaluating the clinical and cost-effectiveness of a conservative approach to oxygen therapy for invasively ventilated adults in intensive care (UK-ROX). £1,586,703
- 2020: Lead applicant: NIHR EME award 18/180: NIHR129318 - Home-based EXercise and motivAtional programme before and after Liver Transplantation: ExaLT trial. £1,364,077.13
- 2020: Co-applicant (primary supervisor for Helen Newman) HEE-NIHR Integrated Clinical Academic Programme - Clinical Doctoral Research Fellowship: Choosing the right tracheostomy tube for patients in the intensive care unit: size matters. £265,880.
- 2020: Co-applicant (primary supervisor for Jacqueline Bennion) HEE/NIHR ICA Pre-doctoral Clinical Academic Fellowship 2020 - NIHR301174. £55,749
- 2018: Co-applicant: PB-PG-0817-20023: A triple-blind randomised placebo-controlled feasibility study to assess the impact of octreotide infusion during liver transplantation on post-operative renal failure. £250,000
- 2016: Co-applicant: Research for Patient Benefit (RfPB) Programme: PB-PG-0815-20002 – Role of ward based goal-directed fluid therapy (GDFT) in acute pancreatitis: a feasibility randomised controlled trial. £249,835
- 2016: Lead applicant: Research for Patient Benefit (RfPB) Programme: PB-PG-0815-20006 – Targeted oxygen therapy in mechanically ventilated critically ill patients. £247,788
- 2016: Lead applicant: National Institute of Academic Anaesthesia (BJA/RCoA) 'The relationship between oxidative stress, mitochondrial function and postoperative outcomes in high risk patients undergoing major surgery.' £93,878
- 2015: Co-applicant. NIHR RfPB – PB-PB-0214-33043 - A feasibility study of Cardiac Output optimisation following Liver Transplantation (COLT trial). £215,971.00

#### **Trial steering / data management responsibilities**

- 2019:- EMPRESS: A feasibility study of Early Mobilisation PRogrammES in Critical Care (TSG Chair)
- 2018:- DAMSEL2: Dose assessment of Melatonin in Sepsis Trial (DMC member)
- 2017:- ALLEGRO: A placebo controlled randomised trial of intravenous lidocaine in accelerating gastrointestinal recovery after colorectal surgery (DMC member)
- 2017-9: DIALIVE: Safety and Performance Trial of DIALIVE Liver Dialysis Device in Acute on Chronic Liver Failure Patients (TSG member)
- 2017-18: OXY-PICU: Safety and feasibility of a clinical trial of permissive hypoxia in paediatric critical illness (TSG member)



**Signature:**

**Date:** 15/09/2020