

CURRICULUM VITAE

Name	Joseph ('Joe') Edmund <u>ARROWSMITH</u>	
eMail address	contact@jamedicolegal.com	
Nationality	British	
Registration	U.K. General Medical Council No.: 3055010 (1985 – date) Full Registration: August 1986. Specialist Registration (Anaesthesia): May 1997 Medical Council, Malta No.: 3171 (2008 – date) North Carolina Board of Medical Examiners No.: 96-01545 (1996-98) U.S. UPIN No.: G44548	
Indemnity	Medical Protection Society. Membership No. 144077	
Information Governance	Information Commissioner's Office. Ref: ZA208699. September 2016-date	
Primary Qualification	M.B., B.S. (St George's, University of London)	June 1985
Postgraduate Diplomas	D.A. (U.K.) / M.F.A.R.C.S.	October 1987
	M.R.C.P. (U.K.)	March 1991
	F.R.C.A. [#567248]	February 1992
	M.D. (University of London)	December 2001
	F.R.C.P. (London). [#46257]	May 2004
	F.F.I.C.M. [#567248]	March 2011
	F.C.I.C.M. [#567248]	August 2026
Specialist Accreditation	J.C.H.T.A. Accreditation	June 1996
	C.C.S.T. (Anaesthesia)	May 1997
Other Qualifications	I.L.T.M. (Member, Institute of Learning & Teaching)	January 2002
	F.H.E.A. (Fellow, Higher Education Academy)	April 2007
Grants, Prizes, & Awards	Southern Society of Anaesthetists. Comerford Memorial Prize (£150). January 1992. University College London. Lord Amulree Travelling Studentship (£3,400). March 1993 British Heart Foundation. Small Meetings Grant (£3,000). June 2001 Advisory Committee on Clinical Excellence Awards (ACCEA) Bronze Award. October 2008 – 2023.	
Current Appointments		
October 2024 - Date	Independent anaesthetic practice Cambridge, Bury St Edmunds, London.	
April 2016 – Date	Elected Committee Member, past Secretary and past President U.K. Association for Cardiothoracic Anaesthesia & Critical Care (ACTACC)	

Secondary Education

Wimbledon College, London. (1975 - 1980)
 School Vice Captain 1979 - 1980
 Awarded Sixth Form - University Scholarship. (1980)

University

St. George's Hospital Medical School, London. (1980 - 1985)
 University College London. (1992 - 1994)

Elective

Jane Furse Memorial Hospital
 Republic of South Africa. (Jan - Mar 1985)

Previous Anaesthetic & Critical Care Appointments

Sep 1986 - Jul 1987	Senior House Officer	St. Peter's Hospital, Chertsey, Surrey.
Aug 1987 - Jan 1988	Senior House Officer	St. George's Hospital, London.
Feb - May 1988	Senior House Officer	St. James' Hospital, Balham, London.
Aug - Oct 1988	Registrar	St. George's Hospital, Tooting, London. (Locum)
Oct 1988 - Jan 1989	Registrar	St. Peter's Hospital, Chertsey, Surrey. (Locum)
Feb 1991	Registrar	Middlesex Hospital, London. (Locum)
Mar 1991 - Feb 1992	Registrar	St. Helier Hospital, Carshalton, Surrey. Sutton Hospital, Sutton, Surrey. Nelson Hospital, Merton Park, London.
Mar - Sep 1992	Registrar	Middlesex Hospital and Elizabeth Garratt Anderson & Soho Hospitals, London.
Sep - Oct 1992	Registrar	University College Hospital, London.
Nov 1992 - Nov 1994	Clinical Lecturer	Cardiothoracic Surgery - Middlesex Hospital Department of Surgery, University College London
	Clinical Assistant	Department of Anaesthetics (Honorary) University College London Hospitals
Sep 1993 - Nov 1994	Senior Registrar	Department of Intensive Care Medicine (Honorary) University College London Hospitals
Dec 1994 - Oct 1995	Senior Registrar	Kingston Hospital, Surrey.
Nov 1995 - Nov 1996	Senior Registrar	St George's Hospital, Tooting, London. Atkinson Morley's Hospital, Wimbledon, London.
Dec 1996 - Nov 1998	Visiting Associate	Department of Anesthesiology Duke University, Durham, NC, USA.
Dec 1996 - Nov 1998	Attending	Critical Care & Cardiothoracic Anesthesiology Duke University Medical Center, Durham, NC, USA.
May 1997 - Nov 1998	Attending	Critical Care Anesthesiology Veterans Affairs Medical Center, Durham, NC, USA.
Aug 1998	Visiting Attending	Critical Care Anesthesiology King Faisal Specialist Hospital, Riyadh, Saudi Arabia
Dec 1998 – Oct 2024	Consultant	Department of Anaesthesia & Critical Care Medicine Royal Papworth Hospital, Cambridge

Other Appointments

Aug 1990 - Jan 1991	Senior House Officer	Cardiology	St. George's Hospital, Tooting, London.
Jan - Jul 1990	Senior House Officer	Haematology	St. George's Hospital, Tooting, London.
Aug 1989 - Jan 1990	Senior House Officer	Geriatrics	Bolingbroke Hospital, Wandsworth, London.
Feb - Jul 1989	Senior House Officer	Medicine	St. George's Hospital, Tooting, London.
Jun - Aug 1988	Registrar (locum)	Medicine	St. James' Hospital, Balham, London.
Feb - Aug 1986	House Officer	Surgery	St. Peter's Hospital, Chertsey, Surrey.
Jul 1985 - Jan 1986	House Officer	Medicine	St. James' Hospital, London.

Examinerships

2006 – 2009	Primary FRCA	Royal College of Anaesthetists
2009 – 2016	Final FRCA	Royal College of Anaesthetists
October 2011	Final FCAI	College of Anaesthetists of Ireland, Dublin
November 2013	Primary MMed(Anaes)	University of Malaysia, Kuala Lumpur, Malaysia
May 2014	Final HKCA Fellowship	Hong Kong College of Anaesthetists
March 2015	Primary & Final Exams	Faculty of Anaesthesia, Colombo University, Sri Lanka
January 2016	Final FCPS(Anaes)	Bangladesh College of Physicians & Surgeons, Dhaka
November 2016	Primary MMed(Anaes)	University of Malaysia, Kota Bharu, Malaysia
2016 – date	PLAB-2	General Medical Council, UK
2016 – date	EDAIC-2	European Society of Anaesthesiology
December 2016	Final FCAI	College of Anaesthetists of Ireland, Dublin
March 2017	Primary & Final Exams	Faculty of Anaesthesia, Colombo University, Sri Lanka
July 2017	Final FCPS(Anaes)	Bangladesh College of Physicians & Surgeons, Dhaka
March 2018	Primary HKCA Fellowship	Hong Kong College of Anaesthetists
November 2023	Primary MMed(Anaes)	University of Malaysia, Kuala Lumpur, Malaysia

Membership of Learned Societies

Association of Anaesthetists of Great Britain & Ireland.
 Institute of Learning & Teaching in Higher Education / Higher Education Academy
 British Medical Association
 Association for Cardiothoracic Anaesthesia & Critical Care (past President)

Editorial / Research Proposal Peer Review

Anesthesia and Analgesia.	Clinical Intensive Care.
British Journal of Anaesthesia.	Lancet
European Journal of Cardio-thoracic Surgery.	Acta Anaesthesiologica Scandinavica
Medical Research Council	University of Birmingham
Royal Victoria Hospital, Belfast	Neurological Foundation of New Zealand
The Cochrane Library	Anaesthesia
NICE	Heart Research UK

Administrative Appointments

1999 – date	Papworth Hospital representative on East Anglian Intensive Care Group.
2001	Organiser – Association of Cardiothoracic Anaesthetists meeting. Cambridge, June 2001.
2004 – 2006	Secretary – Papworth Medical Advisory Committee
2004 – 2009	Secretary – Papworth BMA Local Negotiating Committee
2004 – 2008	Hospital representative local National Programme for IT (NPfIT) Board
2006 – 2015	Clinical lead for information management & technology
2009 – date	Chairman – Papworth BMA Local Negotiating Committee
2010 – 2014	BMA representative on East of England SHA Revalidation Steering Group
2012 – 2014	Chairman, Department of Anaesthesia & Intensive Care, Papworth Hospital.

Medicolegal activity

I have undertaken root cause analysis training and have undertaken several serious untoward incident investigations. I have acted as an expert witness for:

2015	South London Coroner (Independent)
2017	University Hospitals of South Manchester (Defendant)
2017	University Hospitals Birmingham (Defendant)
2018	Blackpool Victoria Hospital (Defendant)
2019	Guys & St Thomas' Hospital (Defendant)
2020	Royal Brompton & Harefield NHS Trust (Claimant)
2020	Black Rock Clinic, Eire (Claimant)
2021	Cork University Hospital (Claimant – in progress)
2022	Basildon & Thurrock Hospitals (Defendant – in progress)
2023	St George's Hospital (Defendant – in progress)
2023	University Hospitals Birmingham (Defendant – in progress)
2023	Connolly Hospital, Blanchardstown, Eire (Claimant – in progress)
2025	Circle Alexandra Hospital et al, Manchester (Defendant – in progress)
2026	Aberdeen Royal Infirmary (Claimant – in progress)

I have attended several inquests as a professional witness.

I have attended an Expert Witness training meetings at the British Medical Association and The Law Society.

Hobbies & Interests

Information technology: Network & web design – Apache, PHP, MySQL, Javascript
Cycling, Sailing, Recreational diving – PADI Master Scuba Diver.

Publications – Peer Reviewed (Original Articles, Reviews, Editorials, Case Reports & Theses)

- Fandino W, Gilbey T, Milne B, Arrowsmith J, Agarwal S, Dodd M, Clayton TC, Kunst G; ACTACC Link-person Network. Factors associated with symptom-to-surgery time in patients undergoing surgical repair for acute type A aortic dissection: an exploratory analysis from a prospective cohort study. *BMJ Surg Interv Health Technol* 2025;**7(1)**: e000304.
- Gilbey T, Milne B, Agarwal S, Choi S-W, Kendall S, Arrowsmith JE, Kunst G. Time Critical Diagnoses and Transfers of Patients with Acute Type A Aortic Dissection in the UK - an ACTACC National Audit of Current Practice. *Anaesthesia* 2024;**80(3)**:248-58
- Brand J, Arrowsmith JE. Respiratory system: applied pharmacology. [Review] *Anaesthesia and Intensive Care Medicine* <https://doi.org/10.1016/j.mpaic.2023.10.007>
- Lwin TN, Mudannayake R, MacDonald S, Arrowsmith JE, Burt C, Besser M, Falter F. Assessing the impact of different heparin dosing regimens for cardiopulmonary bypass on anticoagulation: the HepDOSE pilot study. *Canadian Journal of Anaesthesia* 2023 Nov 20. doi: 10.1007/s12630-023-02645-6.
- Flower L, Arrowsmith JE, Bewley J, Cook S, Cooper G, Flower J, Greco R, Sadeque S, Madhivathanan PR. Management of acute aortic dissection in critical care. [Article] *Journal of the Intensive Care Society* 2023;**24(4)**:409-18. doi:10.1177/17511437231162219
- Miles LF, Burt C, Arrowsmith JE, McKie MA, Villar SS, Govender P, Shaylor R, Tan Z, De Silva R and Falter F. Optimal protamine dosing after cardiopulmonary bypass: The PRODOSE adaptive randomised controlled trial. [Article] *PLoS Med* 2021;**18(6)**:e1003658.
- Brand J, Arrowsmith JE, Respiratory system: applied pharmacology. [Review] *Anaesthesia and Intensive Care Medicine* 2021;**22(3)**:151-5.
- Messer S, Abu-Omar Y, Large SR, Berman M, Kaul P, Arrowsmith J, Quigley R, Cheshire C, Patterson C, Thomas D, Wallwork J, Parmar J, Catarino P. Combined Heart-Lung Transplantation from a Donation after Circulatory Death (DCD) Donor. [Case Report] *Journal of Heart and Lung Transplantation* 2020;**39(12)**:1366-71.
- Brand J, Arrowsmith JE, Respiratory system: applied pharmacology. [Review] *Anaesthesia and Intensive Care Medicine* 2017;**18(12)**:609-13.
- Valchanov KP, Arrowsmith JE. The role of venodilators in the preoperative management of heart failure. [Review] *European Journal of Anaesthesiology* 2012;**29(3)**:121-8.
- Vuytsteke A, Sharples L, Charman G, Kneeshaw J, Tsui S, Dunning J, Wheaton E, Klein A, Arrowsmith J, Hall R, Jenkins D. Randomised trial of circulatory arrest versus cerebral perfusion during pulmonary endarterectomy surgery. [Article] *Lancet* 2011;**378(9800)**:1379-87.
- Lesire S, Arrowsmith JE, Klein AA. Arrêt circulatoire et hypothermie profonde [Review]. *Prat Anesth Réanim* 2011;**15(5)**:297-304.
- Ghosh S, Falter F, Klein AA, Arrowsmith JE. The Papworth BiVent tube: initial clinical experience. [Article] *J Cardiothorac Vasc Anesth* 2011;**25(3)**:505-8.
- Klein AA, Arrowsmith JE. Should routine preoperative testing be abandoned? [Editorial] *Anaesthesia* 2010;**65(10)**:974-6.
- Conolly S, Arrowsmith JE, Klein AA. Deep hypothermic circulatory arrest. [Article] *BJA CEPD Reviews* 2010;**10(5)**:138-42.
- Arrowsmith JE, Klein AA. Care and basic monitoring of the anaesthetized patient. [Article] *Surgery(Oxford)* 2010;**28(4)**:155-8.
- Willmott C, Arrowsmith JE. Point of care testing. [Article] *Surgery(Oxford)* 2010;**28(4)**:159-60.
- Landis RC, Murkin JM, Stump DA, Baker RA, Arrowsmith JE, De Somer F, Dain SL, Dobkowski WB, Ellis JE, Falter F, Fischer G, Hammon JW, Jonas RA, Kramer RS, Likosky DS, Milsom FP, Poullis M, Verrier ED, Walley K, Westaby S. Consensus statement: Minimal criteria for reporting the systemic inflammatory response to cardiopulmonary bypass. [Article] *Heart Surg Forum* 2010;**13(2)**:E116-23.
- Burt CC, Arrowsmith JE. Respiratory failure. [Article] *Surgery(Oxford)* 2009;**27(11)**:475-9.
- Choong CK, Arrowsmith JE, Klein AA, Wells FC. Transannular pulmonary enlargement and bioprostheses for carcinoid disease. [Case Report] *Asian Cardiovasc Thorac Ann* 2009 Oct;**17(5)**:510-12.
- Klein AA, Snell A, Nashef SAM, Hall RMO, Kneeshaw JD, Arrowsmith JE. The impact of intra-operative transoesophageal echocardiography on cardiac surgical practice. [Article] *Anaesthesia* 2009;**64(9)**:947-952.
- Landis RC, Arrowsmith JE, Baker RA, de Somer F, Dobkowski WB, Fisher G, Jonas RA, Likosky DS, Murkin JM, Poullis M, Stump DA, Verrier ED. Consensus Statement: Defining Minimal Criteria for Reporting the Systemic Inflammatory Response to Cardiopulmonary Bypass. [Article] *The Heart Surgery Forum* 2008;**11(5)**:290-6.
- Berman M, Tsui S, Vuytsteke A, Snell A, Colah S, Latimer R, Hall R, Arrowsmith JE, Kneeshaw J, Klein AA, Jenkins DP. Successful extracorporeal membrane oxygenation support after pulmonary thromboendarterectomy. [Case series] *Annals of Thoracic Surgery* 2008;**84(4)**:1261-1267.
- Ghosh S, Klein AA, Prabhu M, Falter F, Arrowsmith JE. The Papworth BiVent tube: a feasibility study of a novel

- double lumen endotracheal tube and bronchial blocker in human cadavers. [Article] *British Journal of Anaesthesia* 2008;**101(3)**:424-8.
25. Ghosh S, Falter F, Goldsmith K, Arrowsmith JE. The Papworth BiVent tube: a new device for lung isolation. [Article] *Anaesthesia* 2008;**63(9)**:996-1000.
 26. Molnar J, Colah S, Larobina M, Large SR, Arrowsmith JE, Klein AA. Cardiopulmonary bypass and deep hypothermic circulatory arrest in a massively obese patient. 2008; **23(4)**: 243-5.
 27. Tormo Belda M, Arrowsmith JE. Care and basic monitoring of the anaesthetised patient. [Article] *The Foundation Years* 2007;**3(6)**:268-71.
 28. Rowe KM, Arrowsmith JE. Interpretation of arterial blood gases. *Surgery (Oxford)* 2007;**25(9)**:375-9.
 29. Arrowsmith JE. The neuromuscular junction. [Article] *Surgery (Oxford)* 2007;**25(3)**:105-11.
 30. Arun Kumar RN, Arrowsmith JE. Point of care testing. [Article] *Surgery* 2006;**24(10)**:341.
 31. Tormo Belda M, Arrowsmith JE. Care and basic monitoring of the anaesthetised patient. [Article] *Surgery* 2006;**24(10)**:329-32.
 32. Arrowsmith JE, Dawson AJ. Advanced cardiovascular monitoring. [Article] *Surgery* 2006;**24(10)**:333-6.
 33. Hogue CW, Palin CA, Arrowsmith JE. Cardiopulmonary bypass management and neurologic outcomes: an evidence-based appraisal of current practices. [Review, Article] *Anesthesia & Analgesia* 2006;**103(1)**:21-37.
 34. Cornelissen H, Arrowsmith JE. Preoperative assessment of the cardiac surgical patient. [Invited article] *British Journal of Anaesthesia: Continuing Education in Anaesthesia, Critical Care & Pain* 2006;**6(3)**:109-13.
 35. Arrowsmith JE, Powell SJ, Nashef SAM. Local clinical quality monitoring for detection of excess operative deaths. [Article] *Anaesthesia* 2006;**61(5)**:423-6.
 36. Arrowsmith JE. Premedication. [Article] *Surgery* 2005;**23(12)**:440-1.
 37. Arrowsmith JE, MacKenzie I. Risk assessment. [Article] *Surgery* 2005;**23(12)**:442-4.
 38. Arrowsmith JE, MacKenzie I. Preoperative assessment of the surgical patient. [Article] *Surgery* 2005;**23(12)**:444-6.
 39. Arrowsmith JE. Preoperative investigation of the surgical patient. [Article] *Surgery* 2005;**23(12)**:447-8.
 40. Chadwick VL, Arrowsmith JE. Recent advances in pediatric resuscitation. [Editorial] *Pediatric Anesthesia* 2004;**14(5)**:417-23.
 41. Stygall J, Fitzgerald G, Steed L, Mulligan K, Arrowsmith JE, Humphries S, Pugsley W, Harrison MJ, Newman SP. Cognitive change 5 years after coronary artery bypass surgery. [Article] *Health Psychology* 2003;**22(6)**:579-86.
 42. Wheeler DW, Arrowsmith JE. NCEPOD: Reconciling recommendations with reality in the ICU. [Editorial] *Surgery* 2003;**21(11)**:ii.
 43. Arrowsmith JE, Mackay JH. Perioperative management of the patient with cardiovascular disease. [Article] *Surgery* 2002;**20(4)**:91-6.
 44. Arrowsmith JE, Cook AC, Birdi I, Ritchie AJ. Hypothermic circulatory arrest in the management of massive pulmonary artery hemorrhage following pneumonectomy. [Case Report] *Case Reports & Clinical Practice Review* 2002;**3(1)**:18-20.
 45. Arrowsmith JE. The neuroprotective effects of remacemide hydrochloride in patients undergoing coronary artery bypass surgery. MD Thesis. University of London 2001.
 46. Arrowsmith JE, Grocott HP, Newman MF, Reves JG. Central nervous system complications of cardiac surgery. [Review Article] *British Journal of Anaesthesia* 2000;**84(3)**:378-393.
 47. Arrowsmith JE, Grocott HP, Newman MF. Neurologic risk assessment, monitoring and outcome in cardiac surgery. [Review Article] *Journal of Cardiothoracic and Vascular Anesthesia* 1999;**13(6)**:736-43.
 48. Arrowsmith JE, Harrison MJG, Newman SP, Stygall J, Timberlake N, Pugsley WB. Neuroprotection of the brain during cardiopulmonary bypass. A randomized trial of remacemide during coronary artery bypass in 171 patients. [Article] *Stroke* 1998;**29(11)**:2357-2362.
 49. Arrowsmith JE, Robertshaw HJ, Boyd JD. Nasotracheal intubation in the presence of frontobasal skull fracture. [Article, Case Report, Review] *Canadian Journal of Anaesthesia* 1998;**45(1)**:71-75.
 50. Gan TJ, Arrowsmith JE. The oesophageal Doppler monitor. [Editorial] *British Medical Journal* 1997;**315(7113)**:893-894.
 51. Arrowsmith JE, Smith GB. Anaesthetic Dilemma - Emergency laparoscopy in a patient with severe asthma. [Article, Case Report] *British Journal of Hospital Medicine* 1996;**55(9)**:593.
 52. Arrowsmith JE, Nanson EM, Bevan DH, Cummin ARC, Woodhead MA. Digital gangrene associated with small cell lung cancer: response to aspirin therapy. [Case Report] *Thorax* 1991;**46(1)**:63-64.
 53. Woodhead MA, Arrowsmith J, Chamberlain-Webber R, Wooding S, Williams I. The value of routine microbial investigation in community acquired pneumonia. [Article] *Respiratory Medicine* 1991;**85**:313-317.
 54. Webb AR, Fernando SSD, Dalton HR, Arrowsmith JE, Woodhead MA, Cummin ARC. Local anaesthesia for fiberoptic bronchoscopy: transcrioid injection or the "Spray as you go" technique? [Article] *Thorax* 1990;**45(6)**:474-477.

Publications – Guidelines

Fletcher N, Lumb A, Arrowsmith JE. Guidelines for the Provision of Anaesthesia Services (GPAS). Guidance on the Provision of Anaesthesia Services for Cardiac and Thoracic Procedures 2018. London: Royal College of Anaesthetists. [<https://www.rcoa.ac.uk/system/files/GPAS-2018-18-CARDIOTHORACIC.pdf>]

Publications – Peer Reviewed (Cited contributor)

1. Bilotta F, Gelb AW, Soriano S, Wang Q, Paoloni F, Rosa G. Pharmacologic therapies for perioperative cerebral protection against neurologic or neurocognitive deficits (Protocol). *Cochrane Database of Systematic Reviews* 2007, Issue 2. Art. No.: CD006450. DOI: 10.1002/14651858.CD006450.
2. Booth JV, Landolfo KP, Chesnut LC, Bennett-Guerrero E, Gerhardt MA, Atwell DM, El-Moalem HE, Stafford-Smith M, Funk BL, Kuhn CM, Kwatra MM, Schwinn DA for the Duke Heart Center Perioperative Desensitization Group. Depression of myocardial β -adrenergic receptor signaling during cardiopulmonary bypass. Impairment of the adenylate cyclase moiety. [Article] *Anesthesiology* 1998;**89(3)**:602-611.
3. Murkin JM, Stump DA, Blumenthal JA, McKhann G for the Consensus Group. Defining dysfunction: group means versus incidence analysis - a statement of consensus. [Article] *Annals of Thoracic Surgery* 1997;**64(3)**:904-905. (Consensus group contributor)

Publications – Edited Books

1. Arrowsmith JE, Roscoe AR, Mackay JH (Eds). *Core Topics in Cardiac Anaesthesia (3rd Edition)*. Cambridge: Cambridge University Press. 2020. [ISBN 978-1108419383]
2. Mackay JH, Arrowsmith JE (Eds). *Core Topics in Cardiac Anesthesia (2nd Edition)*. Cambridge: Cambridge University Press. 2012. [ISBN 978-0-521-19685-7]
3. Mackay JH, Arrowsmith JE (Eds). *Core Topics in Cardiac Anaesthesia*. London: Greenwich Medical Media. 2004. [ISBN 1-841101-33-8]
4. Arrowsmith JE, Simpson J (Eds). *Problems in Anesthesia: Cardiothoracic Surgery*. London: Martin Dunitz. 2002. [ISBN 1-84184-138-2].

Publications – Book Chapters

1. Song P, Arrowsmith JE. Considerations for operations involving deep hypothermic circulatory arrest. In: Falter F, Perrino AC, Baker RA (Eds). *Cardiopulmonary Bypass (3rd Edition)*. Cambridge: Cambridge University Press. 2022. pp80-92.
2. Arrowsmith JE, Mackay JH. Non-cardiac applications of cardiopulmonary bypass. In: Arrowsmith JE, Roscoe A, Mackay JH (Eds). *Core Topics in Cardiac Anesthesia (3rd Edition)*. Cambridge: Cambridge University Press. 2020. pp215-217.
3. Hogue CW, Arrowsmith JE. Temperature management and deep hypothermic arrest. In: Arrowsmith JE, Roscoe A, Mackay JH (Eds). *Core Topics in Cardiac Anesthesia (3rd Edition)*. Cambridge: Cambridge University Press. 2020. pp191-198.
4. Arrowsmith JE. Electrophysiological procedures. In: Arrowsmith JE, Roscoe A, Mackay JH (Eds). *Core Topics in Cardiac Anesthesia (3rd Edition)*. Cambridge: Cambridge University Press. 2020. pp131-136.
5. Catarino P, Arrowsmith JE. Aortic valve surgery. In: Arrowsmith JE, Roscoe A, Mackay JH (Eds). *Core Topics in Cardiac Anesthesia (3rd Edition)*. Cambridge: Cambridge University Press. 2020. pp69-74.
6. Mackay JH, Arrowsmith JE. Common postoperative complications. In: Arrowsmith JE, Roscoe A, Mackay JH (Eds). *Core Topics in Cardiac Anesthesia (3rd Edition)*. Cambridge: Cambridge University Press. 2020. pp55-68.
7. Arrowsmith JE. Symptoms and signs of cardiac disease. In: Arrowsmith JE, Roscoe A, Mackay JH (Eds). *Core Topics in Cardiac Anesthesia (3rd Edition)*. Cambridge: Cambridge University Press. 2020. pp6-10.
8. Arrowsmith JE, Klein AA. Anaesthesia for cardiac surgery. In: Aitkenhead AR, Moppett I, Thompson J (Eds). *Smith and Aitkenhead's Textbook of Anaesthesia (7th Edition)*. Oxford: Churchill Livingstone. 2017. ppXXXX.
9. Arrowsmith JE, Miles L. History and examination. In: Valchanov K, et al (Eds). *Core Topics in Cardiothoracic Critical Care (2nd Edition)*. Cambridge: Cambridge University Press. 2016.
10. Arrowsmith JE, Hogue CW. Deep hypothermic circulatory arrest. In: Ghosh S, Falter F, Perrino AC (Eds). *Cardiopulmonary Bypass (2nd Edition)*. Cambridge: Cambridge University Press. 2016. pp152-167.
11. Klein A, Arrowsmith J. Anaesthesia for cardiac surgery. In: Aitkenhead AR, Moppett I, Thompson J (Eds). *Smith and Aitkenhead's Textbook of Anaesthesia (6th Edition)*. Oxford: Churchill Livingstone. 2013. pp674-89.
12. Arrowsmith JE. Symptoms and signs of cardiac disease. In: Mackay JH, Arrowsmith JE (Eds). *Core Topics in Cardiac Anesthesia (2nd Edition)*. Cambridge: Cambridge University Press. 2012. pp75-80.
13. Arrowsmith JE. Neurologic monitoring. In: Mackay JH, Arrowsmith JE (Eds). *Core Topics in Cardiac Anesthesia (2nd Edition)*. Cambridge: Cambridge University Press. 2012. pp160-7.
14. Mackay JH, Arrowsmith JE. Off-pump coronary artery bypass surgery. In: Mackay JH, Arrowsmith JE (Eds). *Core Topics in Cardiac Anesthesia (2nd Edition)*. Cambridge: Cambridge University Press. 2012. pp186-92.
15. Mackay JH, Arrowsmith JE. Aortic valve disease. In: Mackay JH, Arrowsmith JE (Eds). *Core Topics in Cardiac Anesthesia (2nd Edition)*. Cambridge: Cambridge University Press. 2012. pp193-9.
16. Farnum N, Arrowsmith JE. Cardiac tumors. In: Mackay JH, Arrowsmith JE (Eds). *Core Topics in Cardiac Anesthesia (2nd Edition)*. Cambridge: Cambridge University Press. 2012. pp288-92.
17. Hogue CW, Arrowsmith JE. Deep hypothermic circulatory arrest. In: Mackay JH, Arrowsmith JE (Eds). *Core Topics in Cardiac Anesthesia (2nd Edition)*. Cambridge: Cambridge University Press. 2012. pp387-94.
18. Arrowsmith JE, Mackay JH. Non-cardiac applications of cardiopulmonary bypass. In: Mackay JH, Arrowsmith JE (Eds). *Core Topics in Cardiac Anesthesia (2nd Edition)*. Cambridge: Cambridge University Press. 2012. pp406-8.

19. Arrowsmith JE, Mackay JH. Hematological problems. In: Mackay JH, Arrowsmith JE (Eds). *Core Topics in Cardiac Anaesthesia (2nd Edition)*. Cambridge: Cambridge University Press. 2012. pp465-8.
20. Arrowsmith JE, Ganugapenta MSSR. Intraoperative brain monitoring in cardiac surgery. In: Bonser R, Pagano D, Haverich A (Eds). *Brain Protection in Cardiac Surgery*. London: Springer-Verlag. 2011. pp83-111.
21. Arrowsmith J. Organ system implications of cardiac surgery: Central Nervous System. In: Barnard M, Martin B (Eds). *Cardiac Anaesthesia - Oxford Specialist Handbooks in Anaesthesia*. Oxford: Oxford University Press. 2010. pp73-89.
22. Arrowsmith JE, Falter F. Cardiovascular support: Pharmacological. In: Griffiths M, Cordingley J, Price S (Eds). *Cardiovascular Critical Care*. Oxford: Wiley Blackwell. 2010. pp100-19.
23. Arrowsmith JE, Hogue CW. Deep hypothermic circulatory arrest. In: Ghosh S, Falter F, Cook DJ (Eds). *Cardiopulmonary Bypass*. Cambridge: Cambridge University Press. 2009. pp125-139.
24. Webb ST, Arrowsmith JE. Perioperative cardioprotection. In: Hunter JM, Cook TM, Priebe H-J, Struys MMRF (Eds). *The Year in Anaesthesia and Critical Care 2*. Oxford: Clinical Publishing. 2008. pp71-99.
25. Arrowsmith JE. Venous access. In: Klein A, Vuylsteke A, Nashef SAM (Eds). *Core Topics in Cardiothoracic Critical Care*. Cambridge University Press. 2008. pp70-79.
26. Willmott C, Arrowsmith JE. Point-of-care testing. In: Klein A, Vuylsteke A, Nashef SAM (Eds). *Core Topics in Cardiothoracic Critical Care*. Cambridge University Press. 2008. pp119-124.
27. Saravanan P, Arrowsmith JE. Anaesthesia and mechanical cardiac assist. In: Robert R, Honore PM, Bastien O (Eds). *Les Circulations Extracorporelles en Reanimation [Extracorporeal Circulation in the Intensive Care Unit]*. Paris: Elsevier. 2006. pp421-35.
28. Dempsey CM, Arrowsmith JE. Off-pump coronary artery bypass surgery. In: Hunter JM, Cook TM, Priebe H-J, Struys MMRF (Eds). *The Year in Anaesthesia and Critical Care 1*. Oxford: Clinical Publishing. 2005. pp61-83.
29. White PA, Arrowsmith JE. Ventricular performance. In: Mackay JH, Arrowsmith JE (Eds). *Core Topics in Cardiac Anaesthesia*. London: Greenwich Medical Media. 2004. pp17-22.
30. Arrowsmith JE. Symptoms and signs of cardiac disease. In: Mackay JH, Arrowsmith JE (Eds). *Core Topics in Cardiac Anaesthesia*. London: Greenwich Medical Media. 2004. pp77-82.
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