CURRICULUM VITAE

| NAME | Peter Michael Crean | | | |
|--|---|--|--|--|
| DATE OF BIRTH | | | | |
| EDUCATION: | | | | |
| UNIVERSITY | Queen's University, Belfast | 1970-1976 | | |
| QUALIFICATIONS | MB, BCh, BAO FFA RCS (Ireland) HPT Accreditation FRCA (ad eundum) | July 1976 May 1980 June 1983 May 2005 | | |
| APPOINTMENTS: | | | | |
| PRESENT | Consultant Paediatric Anaesthetist Oct 1984 Royal Belfast Hospital for Sick Children | | | |
| PREVIOUS | | | | |
| House Officer | Belfast City Hospital | Aug 1976 - Jul 1977 | | |
| Trainee in Anaesthetics | N Ireland Training Scheme | Aug 1977– Jun1982 | | |
| Fellow, Dept. of Anaesthetics | Hospital for Sick Children, Toronto | Jul 1982 - Jun 1983 | | |
| Fellow, Neonatal Intensive Care | Hospital for Sick Children, Toronto | Jul 1983 - Dec 1983 | | |
| Fellow, Paediatric 1984Intensive Care | Hospital for Sick Children, Toronto | Jan 1984 - Jun | | |
| Senior Registrar in Anaesthetics | Royal Victoria Hospital Belfast | Jul 1984 - Sep 1984 | | |
| MEMBERSHIP OF SOCIETIES | | | | |
| General Medical Council | | 1976 | | |
| Association of Anaesthetists of Great Britain and Ireland | | 1978 | | |
| Faculty of Anaesthetists, Royal College of Surgeons in Ireland | | 1980 | | |
| Association of Paediatric Anaesthetists of Great Britain and Ireland | | 1984 | | |
| Northern Ireland Society of Anaesthetists | | 1984 | | |
| Ulster Paediatric Society | | 1987 | | |

| Paediatric Intensive Care Society | 1988 - 2005 |
|---------------------------------------|-------------|
| Irish Intensive Care Society | 1989 |
| Northern Ireland Intensive Care Group | 1989 |

RESEARCH:

- 1. Ferris CJ, Crean PM, Mirakhur RK. An evaluation of ORG NC 45 (Vercuronium) in Paediatric Anaesthesia. Anaesthesia, 1983; 38: 943-947.
- 2. Koren G, Goresky G, Crean P, Klein J, Macleod SM. Paediatric Fentanyl dosing based on Pharmacokinetics during Cardiac Surgery. Anesth Analg 1984; 63: 577-82.
- Koren G, Crean P, Klein J, Goresky G, Villameter J, Macleod SM. Sequestration of Fentanyl by the Cardiopulmonary Bypass. European Journal of Clinical Pharmacology. 1984; 27: 51-56.
- 4. Koren G, Crean P, Goresky G, Klein J, Macleod SM. The Pharmacokinetics of Fentanyl in Children with Renal Disease. Res Commun Chem Pathol Pharmacol 1984; 46(3): 371-379.
- 5. Collins C, Koren G, Crean P, Klein J, Roy L, Macleod SM. Fentanyl Pharmacokinetics and Haemodynamic Effects in Preterm Infants during Ligation of Patent Ductus Arteriosus. Anesth Analg 1985; 64:1078-1080.
- Crean P, Koren G, Goresky G, Klein J, Macleod SM. Fentanyl-Oxygen versus Fentanyl-N20/Oxygen Anaesthesia in children undergoing cardiac surgery. Can Anaesth Soc J 1986; 33: 36-40.
- 7. Koren G, Goresky G, Crean P, Klein J, Macleod SM. Unexpected alteration in Fentanyl Pharmacokinetics in children undergoing cardiac surgery: Age related or disease related. Dev Pharmacol Ther 1986; 9: 183-191.
- Glasgow JF, Jenkins JG, Hicks EM, Keilty SR, Crean PM, Black GW, Fannin TF. The prognosis of Reye's syndrome in Ireland. Can it be improved. Ir J Med Sci 1986; 155: 111-116.
- 9. Van Obbergh LJ, Crean PM. Malignant Hyperthermia: Routine monitoring and early detection. Acta Anaesth Belg 1986; 37:267-269.
- Jenkins JG, Glasgow JFT, Black GW, Fannin TF, Hicks EM, Keilty SR, Crean PM. Reye's Syndrome: Assessment of Intracranial Monitoring. Br Med J 1987; 294: 337-338.
- 12. Sampaio MM, Crean PM, Keilty SR, Black GW. Changes in oxygen saturation during inhalation induction of anaesthesia in children. Br J Anaesth 1989; 62: 199-201.
- 13. Gallagher TM, Crean PM. Spinal anaesthesia in infants born prematurely. Anaesthesia 1989; 44: 434-436.
- 14. McAloon J, Carson D, Crean P. Cerebral Oedema Complicating Diabetes Ketoacidosis. Acta Paediatr Scand 1990; 79:115-117.
- 15. Fitzpatrick KTJ, Black GW, Crean PM, Mirakhur RJ. Continuous vecuronium

infusion for prolonged muscle relaxation in children. Can J Anaesth 1991; 38:169-174.

- 16. Crean PM, Laird CRD, Keilty SR, Black GW. The Influence of Atropine Premedication on the Induction of Anaesthesia with Isoflurane in Children. Paediatric Anaesthesia 1991; 1:37-39.
- 17. Wilson DC, Crean PM, Jenkins JG. Adult Respiratory Distress Syndrome (ARDS) Complicating Meningococcaemia. Ir J Med Sci 1991; 160:10-11.
- McAloon J, Crean PM, Jenkins J, McClure G. Evaluation of paediatric Intensive Care in a Regional Centre. Archives of Diseases in Childhood 1991; 66:1043-1046.
- Syed SA, Taylor RH, Crean PM, Stewart RJ. Successful Use of Monoclonal Anti-lipid-a IgM in Infant with Meningococcal Sepsis. The Lancet 1992; 339:496.
- 20. Gallagher TM, Darling R, Potts SR, Dempsey S, Crean PM. Christmas Disease and Pyloromyotomy. Paediatric Anaesthesia 1992; 2:335-338.
- 21. Laird CRD, Mulholland D, Crean PM, Black GW. The Effects of Halothane and Isoflurane on Forearm Blood Flow in Children as determined by Venous Occlusion Plethysmography. Paediatric Anaesthesia 1993; 3:79-82.
- 22. Mulholland D, Laird CRD, Crean PM, Black GW. The effects of halothane and isoflurane on hand blood flow in children. (As Determined by venous occlusion plethysmography) Paediatric Anaesthesia 1994;4:83-86.
- 23. Gadiyar V, Gallagher TM, Crean PM, Keilty SR and Taylor RH. The Combination of Rectal Diclofenac and Caudal Bupivacaine improves postoperative analgesia in Children. Anaesthesia 1995; 50: 820-822.
- 24. Paxton D, Taylor RH, Gallagher TM, Crean PM and Keilty SR. Postoperative Emesis following Otoplasty in Children; A Controlled Trial with Ondansetron or Droperidol. Anaesthesia 1995; 50: 1083-1085.
- 25. Austin S, McAtamney D, Maguire P, Loan P, Crean PM. A study to assess the feasibility of using glucometer measured blood glucose on fresh blood sampled from the surgical field. Paediatr Anaesth 2000; 10: 691-2
- 26. P M Crean, M A Stokes, C Williamson and D J Hatch. Quality in paediatric anaesthesia: a pilot study of interdepartmental peer review. Anaesthesia 2003; 58: 543-548.
- 27. Bosenberg AT, Thomas J, Cronje L, Lopez T, Crean PM, Gustafsson, Huledal G and Larsson LE. Pharmacokinetics and efficacy of ropivacaine for continuous epidural infusion in neonates and infants. Pediatric Anesthesia 2005; 15: 739-749.

LETTERS

- 1. Keilty SR, Crean PM, Gallagher TM, Taylor TH. Anaesthetic techniques and trainee anaesthetists. Anaesthesia 1991; 46: 777-9.
- 2. Syed SA, Taylor RH, Crean PM, Stewart RJ. Sucdessful use of monoclonal Antilipid-A IgM in an infant with meningococcal sepsis. Lancet 1992; 339: 678.

EDITORIALS

Sedation and neuromuscular blockade in paediatric intensive care; a review of practice in the United Kingdom and North America. Pediatric Anaesthesia 2004: 14; 439-442.

PATIENT INFORMATION

'Your Child's General Anaesthetic' 2003. I was the Topic Leader in this Information for Patient's project, Royal College of Anaesthetists. This received an award (Highly Commended) at the BMA Patient Information Awards Ceremony in November 2004. Reviewed 2008

Topic leader in RCA Risk Project - 'Equipment Failure', 2006. Reviewed 2009

REVIEW ARTICLES

Crean PM and Taylor RH. Inhalation Agents in Paediatric Anaesthesia. Current Anaesthesia and Critical Care; Mini-symposium: Paediatric Anaesthesia (1994) 5, 197-201.

Crean PM. Postoperative Nausea and Vomiting in Children. Today's Anaesthetist 1997; 12: 5-8.

Crean PM. Anaesthesia for the Prematurely Born Infant. Current Anaesthesia and Critcial Care 2000: 11; 245-249.

Gormley SMC and Crean PM. Basic Principles of Anaesthesia for Neonates and Infants. BJA CEPD Reviews 2001:1;130-133.

Crean PM. Special Considerations for Anaesthesia in the Premature Baby. Anaesthesia and Intensive Care Medicine 2002: 3; 77-79.

Crean PM. The Association of Paediatric Anaesthetists Interdepartmental Peer Review Scheme. Bulletin 17, The Royal College of Anaesthetists, January 2003.

Doherty GM, Chisakuta C, Crean P and Shields MD. Anaesthesia and the child with asthma. Pediatric Anesthesia 2005; 15: 446-454.

BOOK CHAPTERS

Crean PM. Neonatal Physiology. Chapter in Handbook of Neonatal Anaesthesia 1996, Hughes, Mather and Wolf. W B Saunders Company Ltd

Crean P, Chisakuta A. Effects of prematurity. In: Bingham R, Lloyd-Thomas A, Sury M, eds. Hatch and Sumner's Textbook of Paediatric Anaesthesia, Third edition. Edward Arnold, 2008

Crean P, Hicks E. Essentials in neurology and neuromuscular disease. In: Cote CJ, Lerman J, Todres ID, eds. A practice of anesthesia for infants and children. Philadelphia: Saunders, Elsevier, 2009

INVITED SPEAKER

I have presented numerous scientific papers relating to paediatric anaesthesia and intensive care, both nationally and internationally.

EDITORIAL ACTIVITIES

| Reviewer of manuscripts: | 'Pediatric Anesthesia' 'British Journal of Anaesthesia' |
|--------------------------|--|
| Book reviewer: | 'Anaesthesia' |
| | |

Member of Editorial Advisory Board of 'Pediatric Anesthesia', 2004 - 2010.

Member of the Editorial Board of 'Paediatric Anaesthesia', 2010.

NATIONAL AUDIT ACTIVITY

Audit of adverse incidents occurring in 10,000 epidurals in children in the UK. Member of the review team.

Audit of adverse incidents occurring in 10,000 opioid infusions in children in the UK (2008-9). Member of the review team.

TEACHING AND EDUCATION

| Anaesthetic Committee Member Northern Ireland Council for Postgraduate Medical Education | 1987 - 1998 |
|--|-------------|
| FFARCSI Part 1 Examiner, Faculty of Anaesthetists, Royal College of Surgeons in Ireland | 1990 – 2010 |
| College Tutor in Anaesthetics Royal Group of Hospitals | 1992- 1998 |
| Member Anaesthetic Education Sub-committee Royal Hospitals Trust | 1986 - 1998 |
| Chairman Anaesthetic Education Sub-committee Royal Hospitals Trust | 1996 - 1998 |
| HOSPITAL COMMITTEE MEMBERSHIP | |
| Anaesthetic Education Sub-Committee, Royal Group of Hospitals | 1986 - 1998 |
| Anaesthetic Audit Committee Royal Group of Hospitals | 1990 - 1993 |
| Theatre Users Committee, Royal Belfast Hospital for Sick Children | 1987 - 1989 |
| Chairman Hospital Mortality Committee Royal Belfast Hospital for Sick Children | 1991 - 1993 |

| Resuscitation Committee, Royal Group of Hospitals | 1991 - 1992 | | |
|---|-------------|--|--|
| Sub-director for Anaesthesia and ICU Paediatric Directorate Royal Hospitals Trust | 1995 -1997 | | |
| Member of Strategy Working Group: Getting it Together A Strategy for Children's Services The Royal Hospitals | 1996 | | |
| Lead Clinician, Acute Pain Service Royal Belfast Hospital for Sick Children | 1998 - 2005 | | |
| Clinical Director Surgical and Critical Care Services Royal Belfast Hospital for Sick Children Royal Hospitals Trust | 2003 - 2008 | | |
| Chairman, Excellence and Governance Committee, RBHSC | 2003 - 2011 | | |
| N IRELAND COMMITTEE MEMBERSHIP | | | |
| Honorary Socratary & Troccuror | | | |

Honorary Secretary & Treasurer Ulster Paediatric Society 1989-1991

Member of Regional Working Group Care of the Acutely III Child Eastern Health Board 1997-1998

Chairman Paediatric Anaesthetic Group in N Ireland 1999 - 2004

Member of N Ireland Working Group on Hyponatraemia in Children 2001 – 2002

Member of the Human Organs Enquire Implementation Sub-group on the guidance to the HPSS and Consent 2002-2004.

Member of the Human Organs Enquiry Implementation Sub-group on Public Information and Communication 2003.

Northern Ireland Regional Paediatric Fluid Therapy Working Group 2006.

Member of 'Paediatric Surgery Working Group Phase 1', Department of Health, N Ireland. 2008

Member of the 'Paediatric ENT Surgery Group, Department of Health, N Ireland, 2008-9

Guideline and Audit Implementation Network (GAIN). Member of Guideline Development Group on 'Hyponatraemia in Adults. 2008-9

Guideline and Audit Implementation Network (GAIN). Member of Guideline Development Group on CVAD Guideline 2010 – 2011.

NATIONAL COMMITTEE MEMBERSHIP

Executive Committee Member Federation of European Associations of Paediatric Anaesthetists 1992-1995

Liaison Committee Member Association of Paediatric Anaesthetists of Great Britain and Ireland British Association of Paediatric Surgeons Royal College of Paediatrics and Child Health 1996-2000

Member of the Paediatric Group National Confidential Enquiry into Perioperative Deaths 1998 – 1999

Member of Working Group on Paediatric Anaesthesia and Emergency Care in District General Hospitals 2004-6. "Care of the acutely ill or injured child: a team response" published 2006

Member of External Reference Group, Children's Hospital Service Pilot Improvement Review, Healthcare Commission. 2004-2005

Member of the Children's Surgical Forum, Royal College of Surgeons, England 2005-07

'Joint statement on the provision of general paediatric surgery provision in the District General Hospital', 2006. Member of the working group and co-signatory as President of the APA.

Member of working group revising 'Children's Surgery: a first class service'. 2006-07. 'Surgery for children – delivering a first class service' published July 2007

NICE Guideline Development Group on Sedation in Children 2008 - 2010

NCEPOD Advisor 2009 – 2011 on deaths following surgery in children. 'Are We There Yet?' Published October 2011.

ASSOCIATION OF PAEDIATRIC ANAESTHETISTS OF GREAT BRITAIN AND IRELAND

Executive Committee Member Association of Paediatric Anaesthetists of Great Britain and Ireland 1990-1995

Co-opted Member 2000-2003

Honorary Secretary Association of Paediatric Anaesthetists of Great Britain and Ireland 1996 - 2000

Chairman Scientific Subcommittee Association of Paediatric Anaesthetists of Great Britain and Ireland 1997 – 2000 Member Scientific Subcommittee Association of Paediatric Anaesthetists of Great Britain and Ireland 2000 - 2007

Chairman Interdepartmental Peer Review Committee Association of Paediatric Anaesthetists 1999 – 2004

President Elect Association of Paediatric Anaesthetist of Great Britain and Ireland. 2003 -5

President Association of Paediatric Anaesthetist of Great Britain and Ireland. 2005 -7

Chairman, APA Clinical Excellence Awards Committee 2007-9

Immediate Past President APA 2007 - 2009

Chairman, APA Professional Standards Committee 2009 - 2011

INTERNATIONAL COMMITTEE MEMBERSHIP

Executive board member of the European Society for Paediatric Anaesthesiology 2010 – to present

APPRAISAL

Appraiser for Paediatric Anaesthetists, Royal Belfast Hospital for Sick Children 2002 -

GENERAL MEDICAL COUNCIL

General Medical Council Performance Assessment Course, London, 19-21 February 2002.

GMC Performance Appraiser 2002 -

GMC Specialist Adviser for Committee on Professional Performance 2002-

Professional and Linguistic Assessments Board (PLAB) examiner, General Medical Council 2002-2006. This is an examination taken by overseas doctors (non EEA) wishing to practice in the UK.

CV – Dr Crean

Updated Information to be added to Dr Crean's CV:

- A Practice of Anesthesia for Infants and Children, 5th Edition, Saunders, Feb 2013. Chapter 22: Essentials of Neurology and Neuromuscular Diseases. Dr P M Crean, Dr D Peake
- Appointed Chair for NICE Guideline on IV fluid therapy in children (April 2013)