CURRICULUM VITAE

ADRIAN CHRISTOPHER GARDNER BM MRCS (Eng) FRCS (Tr & Orth)

Consultant Spinal Surgeon

The Royal Orthopaedic Hospital & Birmingham Children's Hospital

PERSONAL DETAILS

Name	Adrian Christopher Gardner
Date of birth	12 July 1975
Nationality	British
Work address	The Royal Orthopaedic Hospital NHS Foundation Trust Bristol Road South Northfield Birmingham B31 2AP
Email	adrian.gardner@nhs.net
NHS Secretary	Laura Hood 0121 685 4083 laura.hood2@nhs.net
Private Secretary	Jan Clarke 0121 450 8928 <u>steve-janclarke@talktalk.net</u>
GMC (UK)	Full Registration 4-8-1999 Registration number 4519878 Full Registration with Specialist Registration 3-10-2008

QUALIFICATIONS

1998	Bachelor of Medicine (University of Southampton)
2001	MRCS (England)
2006	FRCS (Trauma & Orthopaedics)
2007	ATLS revalidation (ATLS instructor status)
2008	Certificate of Completion of Training in Trauma and Orthopaedic Surgery (19-10-2008)

CURRENT APPOINTMENT

January 2009 to date	Consultant Spinal Surgeon Royal Orthopaedic Hospital and Birmingham Children's Hospital, Birmingham UK
HIGHER SURGICAL TRAINING	
March 2008 – March 2009	National Spine Fellow, Leeds General Infirmary, Leeds. Mr Millner, Mr Rao, Mr Dunsmuir, Mr Towns. <i>Orthopaedic and Neurosurgical Spine.</i>
September 2007 - March 2008	Leeds General Infirmary, Leeds. Mr Millner. <i>Spine and Trauma.</i>
January - September 2007	Royal Orthopaedic Hospital, Birmingham. Mr Stirling, Mr Marks, Mr Jackowski, Mr Spilsbury, Mr Thompson. <i>Spine.</i>
July 2006 - January 2007	Royal Orthopaedic Hospital, Birmingham. Mr Learmonth, Mr Chana <i>Arthroscopy</i> .
January 2006 - July 2006	Royal Orthopaedic Hospital, Birmingham. Mr Stirling, Mr Marks, Mr Jackowski, Mr Spilsbury, Mr Thompson. <i>Spine.</i>
July 2005 - January 2006	Heartlands and Solihull Hospital, Birmingham. Mr Bryan, Mr Hughes, Mr Ramos.

	Upper limb, foot and ankle, lower limb arthroplasty and trauma.
January 2005 - July 2005	Coventry and Warwickshire Hospital, Coventry. Mrs Dunn and Mr Clegg. <i>Paediatric orthopaedics.</i>
July 2004 - January 2005	Coventry and Warwickshire Hospital, Coventry. Mr Wade and Mr Cherry. <i>Upper limb and trauma.</i>
January 2004 - July 2004	Selly Oak Hospital, Birmingham. Professor Porter. <i>Regional trauma centre, sports medicine.</i>
July 2003 - January 2004	Manor Hospital, Walsall. Mr Alo. Spine, general orthopaedics and trauma.
January 2003 - July 2003	Alexandra Hospital, Redditch. Mr Bell. <i>Knee, hip and trauma.</i>
August 2002 - January 2003	Selly Oak Hospital, Birmingham. Mr Craigen, Mr Sargeant. <i>Regional trauma centre and hand surgery.</i>

POST MRCS SHO APPOINTMENTS

February 2002 - August 2002	Neurosurgical SHO, adult and paediatric.
	Radcliffe Infirmary, Oxford.
	Mr Stacey, Mr Richards, Mr Cadoux-
	Hudson.

August 2001 - February 2002	Senior SHO Bedford Hospital, Bedford. Mr Nel.
	Upper Limb and Shoulder.

BASIC SURGICAL TRAINING

February 2001 - August 2001	SHO in ENT. Bedford Hospital. Mr Hoare.
August 2000 - February 2001	SHO in General Surgery. Bedford Hospital. Mr Eldin.
February 2000 - August 2000	SHO in Orthopaedics and Trauma. Bedford Hospital. Mr Rawlins. <i>Knee, Hip and Foot</i>
August 1999 - February 2000	SHO in Accident and Emergency. Bedford Hospital. Mr Shankar.

HOUSE JOBS

February 1999 – August 1999	PRHO in General Surgery. Southampton General Hospital. Mr Royal, Mr Morris.
August 1998 - February 1999	PRHO in General Medicine, Royal Hospital Haslar, Gosport. Surgeon Captain Edmonstone RN Surgeon Commander Hedger RN

PUBLICATIONS

Telephone survey in to the management of displaced intracapsular femoral neck fractures in the UK. Crossman PT, Khan RJK, MacDowell A, **Gardner A**, Reddy NS, Keene GS. Injury 2002; 33 (5): 383- 386 JBJS (Br) 2002; 84-B Supp III: 274

Steroid injection of the knee- is it in yet? – Green's sign **Gardner A,** Datta A, Green M. Annals of the Royal College of Surgeons of England 2003; 85: 428

Reducing MRSA on Orthopaedic Wards. Datta A, **Gardner A,** Bell K eBMJ Rapid Response. 25-7-2004

Man Versus Car – Rollover Injury. Gardner A, Grannum S, Porter K. Ambulance UK 2004; 19 (4): 236- 237

Anterior Pneumothorax. **Gardner A,** Grannum S, Porter K, Bradley S. Injury Extra 2004; 35 (12): 108- 110

Damage Control in Orthopaedic Trauma. Grannum S, **Gardner A,** Porter K. Trauma 2004; 6 (4): 279- 284

Distracting injuries- missed spinal injury. **Gardner A,** Grannum S, Qureshi A, Porter K. Ambulance UK 2005; 20: 6- 7

MRSA- free elective orthopaedic surgery. Datta A, **Gardner A**, Bell K. Hip International 2005; 15: 171- 176 JBJS (Br) 2005; 87-B Supp II: 153

Thoracic and Lumbar Spine Injuries **Gardner A,** Grannum S, Porter K. Trauma 2005; 7 (2): 77- 85

Cervical Spine Trauma. Gardner A, Grannum S, Porter K. Trauma 2005; 7 (3): 109- 121

Re-transfusion versus vacuum drains in primary total hip replacement. **Gardner A,** Datta A, Bell K. Hip International 2005; 15: 223- 225 The Apollo 1 Astronauts Gardner A. eBMJ Rapid Response. 4-12-05.

Letter in response to 'A Fatal Shot: the Death of Admiral Horatio Viscount Lord Nelson'

Gardner A.

eletters, <u>www.rcseng.ac.uk</u> 16-1-06.

The use of the Wards Dissector in open reduction of a congenitally dislocated hip.

Lakshminarayanan B, **Gardner A,** Clegg J, Dunn I. Annals of the Royal College of Surgeons of England 2006; 88: 415

A new way of using a collar and cuff sling. **Gardner A,** Lakshminarayanan B. Annals of the Royal College of Surgeons of England 2006; 88: 505

MASH is my reason for being a doctor. **Gardner A.** eBMJ Rapid Response. 6-1-07.

Thromboprophylaxis in Spinal Surgery. **Gardner A,** Jackowski A, Grainger M, Spilsbury J, Marks D, Stirling A, Thompson A. eBMJ Rapid Response. 28-5-07.

Operative treatment of spinal deformity in patients with a Cavopulmonary shunt or Fontan circulation.

Gardner A, Spilsbury J, Marks D, Thompson A, Tatman A. Paper by title SRS Meeting Edinburgh September 2007.

The relationship between Cobb angle and ISIS2 lateral asymmetry. Berryman F, **Gardner A**, Pynsent P, Fairbank J. Paper read by title SRS meeting Edinburgh September 2007.

Post operative spinal surgery observation. How good are you? **Gardner A,** McBride T, Spilsbury J, Marks D. JBJS (Br) 2008; 90-B Suppl III: 478.

B Twin cages and facet screws- minimally invasive fusion. **Gardner A,** Pitman I, Stirling A. JBJS (Br) 2008; 90-B Suppl III: 481.

What's new in spinal surgery. **Gardner A,** Dunsmuir R. Continuous Education in Anaesthesia, Critical Care and Pain 2008; 8: 186-188 Translaminar screw fixation of a kyphosis of the cervical and thoracic spine in neurofibromatosis. **Gardner A,** Millner P, Liddington M, Towns G.

JBJS (Br) 2009; 91 (9): 1252- 1255

Ten years of spinal deformity correction in the presence of a cord syrinx. Haden N, **Gardner A,** Millner P, Rao A, Dunsmuir R, Dickson R. JBJS (Br) 2009; 91-B Suppl III: 487

Spinal Deformity as a complication of treated intra or extra spinal paediatric tumours.

Gardner A, Haden N, Millner P, Rao A, Dunsmuir R, Dickson R. JBJS (Br) 2009; 91-B Suppl III: 490

Clinical Assessment of Scoliosis. **Gardner A** Orthopaedics and Trauma 2011 25;6:397-402

BOOK CHAPTERS

Treatment strategies for spinal cord compression and fractures. Stirling A, **Gardner A**, Tillman R. In Therapeutic Strategies in Prostate Cancer. Editors Feneley M, Payne H. Clinical Publishing, Oxford 2007.

Inpatient module: Principles of spine surgery – approaches, decision making and perioperative considerations pre- course learning. Haden N, **Gardner A.**

In Clinical Skills in Spinal Assessment and Management. Editor Stirling A.

The Royal College of Surgeons of England, London 2010.

Application of a Halo or Traction to the Cervical Spine. **Gardner A.** In <u>www.ebrainjnc.com</u>

Editors Shorvon, Thompson, Cock & Berger.

PRIZES

Runner up for best paper at the Central Orthopaedic Club meeting in Milton Keynes in March 2001.

Winner of Best Special Poster at Britspine in Belfast in May 2008.

RESEARCH INTERESTS

Surface topography in Adolescent Idiopathic Scoliosis

Sagittal Profile in Adolescent Idiopathic Scoliosis

PRESENTATIONS

Retrospective analysis of the risk factors for morbidity and mortality in combined aortic valve replacement and coronary artery bypass surgery at Southampton Cardiothoracic Centre between 1974 and 1997.

Presented at 4th Year Medical Conference at Southampton General Hospital May 1997.

Telephone survey in to the management of displaced intracapsular femoral neck fractures in the UK.

Presented at the Central Orthopaedic Club meeting in Milton Keynes in March 2001 and the Australasian Osteoarthritis Society meeting in Queenstown New Zealand, 2001.

The future of elective orthopaedic surgery – An MRSA free ward.

Presented at the Naughton Dunn meeting in Birmingham November 2003 and the British Society of Surgery of the Knee meeting in Basingstoke April 2004.

Proven venous Thrombotic events following arthroplasty- what are the figures?

Presented at the Naughton Dunn meeting in Birmingham November 2005.

B Twin Cages and Facet Screws – The Birmingham Experience.

Presented at the B Twin meeting in Birmingham June 2006, and the British Scoliosis Society in Dublin September 2006.

Post Operative Spinal Surgery Neurological Observation – How good are you?

Presented at the British Scoliosis Society in Dublin. September 2006.

Modified Ponseti Casting – A New Soft Option.

Presented at the European Foot and Ankle Society in Prague. September 2006.

The future of spinal training in the UK.

Presented at the AO Spine Forum in London . November 2006.

The management of high grade spondylolisthesis in adolescents.

Presented at the AO Spine Forum in Sheffield. March 2007.

An unusual pseudarthrosis.

Presented at the 3rd Advanced Deformity Meeting in Monte Carlo. March 2007.

Operative treatment of spinal deformity in patients with a Cavopulmonary shunt or Fontan circulation.

Presented at the Naughton Dunn Meeting in Birmingham. November 2007.

Congenital Scoliosis, Kyphosis and Thoracic Insufficiency Syndrome. Pathoanatomy, Classification and Management.

Presented at the Leeds Scoliosis Forum in Leeds. November 2007.

Material considerations in cervical disc replacement.

Presented at the AO Spine Forum in Edinburgh. March 2008.

Spinal deformity as a complication of treated intra or extra spinal tumours.

Presented at Britspine in Belfast. May 2008.

Ten years of spinal deformity correction in the presence of a cord syrinx.

Presented at Britspine in Belfast. May 2008.

Kyphosis – Normal values and measurement, latrogenic flatback deformity and Scheuermann's kyphosis.

Presented at the Leeds Scoliosis Forum in Leeds. November 2008.

Use of perioperative cell salvage and autologous blood transfusion drains in scoliosis surgery.

Presented at the British Scoliosis Society in Leicester. April 2009.

Can the genetic profile affect curve progression in AIS.

Presented at IGASS meeting in Prague December 2009.

Non fusion anterior release with posterior growing rod instrumentation in early onset scoliosis – does it work?

Presented at Britspine 2010 in Liverpool April 2010.

A case of progression of deformity after initial surgery

Presented at 6th Advanced Deformity Meeting in Zurich

May 2010

A comparison of ISIS2 lateral asymmetry and radiographic Cobb angle measurement

Presented at British Scoliosis Society in Manchester November 2010

Influence of Cobb angle and ISIS2 surface topography volumetric asymmetry on SRS-22 outcome scores in scoliosis

Presented at British Scoliosis Society in Manchester November 2010

Strategic vertebrae and the role of classifications

Presented at Adult deformity solutions course in Amsterdam February 2011

The role of biomaterials in obtaining a good fusion

Presented at Adult deformity solutions course in Amsterdam February 2011

Clinical application of surface topography in scoliosis

Presented at 12th Phillip Zorab Symposium in London March 2011

Scoliosis for the FRCS

Presented in Birmingham May 2011

High Grade Spondylolisthesis

Presented at the 7th Advanced Deformity Meeting in Stockholm May 2011

Post-Operative Wound Infection in Growing Rod Surgery for Early-Onset Scoliosis

Presented at the ICEOS Meeting in Orlando November 2011

AUDIT

Audit in to the management of head injuries in the Accident and Emergency Department following the publication of guidelines by the Royal College of Surgeons. November 1999. Bedford Hospital.

This led to the introduction of a head injuries management sheet for use by all staff in the Accident and Emergency Department.

Audit in to documentation and prescribing practice in ENT following CNST and Trust guidelines. April 2001. Bedford Hospital.

This led to a definitive guide on the standard of documentation required for best practice and a redesigned prescription chart to be introduced.

A member of working group to redesign hospital wide audit practice in Walsall. November 2003. Walsall Hospital.

This involved a hospital wide approach to the process of audit to create a structured environment for future audit projects along best practice guidelines.

Design and implementation of audit for orthopaedic preoperative assessment in Walsall. December 2003. Walsall Hospital.

Significant involment in the design and implementation of a proforma to fully examine the preoperative assessment of elective orthopaedic cases.

Audit of UK TARN data 2002 - 2003. April 2004. Selly Oak Hospital. This showed that there was poor compliance with data collection and submission to UK TARN. This led to the recommendation for an independent data collection process to be instituted, separated from clinical staff.

Audit of an early MRI screening protocol for occult scaphoid fractures. May 2006. Coventry and Warwick Hospital.

This audit confirmed that the use of acute MRI scans for occult scaphoid fractures is sensitive and cost effective leading to its introduction as standard management.

Audit of spinal observations in HDU following major spinal surgery. June 2006. Royal Orthopaedic Hospital.

Audit results revealed poor levels of post operative observations and documentation from all clinical staff. This resulted in a new protocol and neurological observation chart being devised.

Audit of referral letters to a regional spinal unit. August 2007. Royal Orthopaedic Hospital.

These results showed that referring clinicians had limited knowledge of spinal conditions and lacked some understanding of the management options available and provided recommendations for education.

Audit of antibiotic prophylaxis for spinal surgery in both orthopaedics and neurosurgery. Does a proforma make a difference? March 2008. Leeds General Infirmary.

The results revealed that a proforma does lead to greater amount of prophylactic antibiotic doses being given before the start of a case. A proforma will now be adopted across both disciplines.

POSTERS

Operative treatment of spinal deformity in patients with a Cavopulmonary shunt or Fontan circulation.

Poster at SRS Eastern European Meeting. Budapest. June 2007.

Poster at Britspine 2010. Liverpool. April 2010

The relationship between Cobb angle and ISIS2 lateral asymmetry.

Poster at SRS Eastern European Meeting. Budapest. June 2007.

Spinal deformity as a complication of treated intra or extra spinal tumours.

Poster at Britspine. Belfast. May 2008.

Poster at Naughton Dunn Meeting. Birmingham. May 2008.

Non fusion anterior release with posterior growing rod instrumentation in early onset scoliosis – does it work?

Poster at Britspine 2010. Liverpool April 2010.

E poster at IMAST 2010. Toronto. July 2010.

Post-Operative Wound Infection in Growing Rod Surgery for Early-Onset Scoliosis. GSSG Study Group.

E poster at IMAST 2011. Copenhagen July 2011.

Accepted for E poster at POSNA 2012

COURSES

Basic Surgical Skills	Leicester General Hospital	March 2000
CCrISP Course	Northwick Park Hospital	May 2001
AO Basics for Surgeons	Leeds University	July 2001
AO Spine Instructional course	Leeds	May 2002
Management Awareness for SpR's	Solihull	October 2003
ATLS Instructor Course	London	May 2004
Definitive Surgical Trauma Skills	London	March 2005
Cadaveric Spinal Dissection Course	Dublin	September 2006
AO Spine Forum	London	November 2006
Scoliosis Forum	Leeds	January 2007
Cervical Spine Research Society Instructional Cours		March 2007
AO Spine Forum	Sheffield	March 2007
3 rd Advanced Deformity Meeting	Monte Carlo	March 2007
SRS Meeting	Budapest	June 2007
SRS Meeting	Edinburgh	September 2007
Thoracic Pedicle Screws	Stoke on Trent	September 2007
Complexities in Spinal Deformity - IGASS	Geneva	January 2008
AO Spine Forum	Edinburgh	March 2008
XLIF Course	San Diego	April 2008

Britspine 2008	Belfast	May 2008
Passionate about Spine	London	June 2008
TLIF Cadaveric Workshop	Barcelona	September 2008
SRS Meeting	Salt Lake City	September 2008
Cervical spine cadaveric Workshop	Barcelona	September 2008
Anterior Lumbar Cadaveric and Prodisc Workshop	Vienna	November 2008
Midas Rex Course	Leeds	December 2008
SRS Meeting	San Antonio	September 2009
Spinal Osteotomies	Newcastle	October 2009
IGASS Spinal Deformity Symposium	Prague	December 2009
ICH GCP Level 3 for conducting research	Birmingham	December 2009
AO Tips for Trainers	Stratford on Avon	March 2010
Britspine 2010	Liverpool	April 2010
Legal Aspects of Surgical Practice	London	May 2010
6 th Advanced Deformity Meeting	Zurich	May 2010
Advanced Fixation Techniques for Cervical S	Raynham pine	September 2010
SRS Meeting	Kyoto	September 2010
ICEOS Meeting	Toronto	November 2010
Meeting of Minds	Stratford on Avon	January 2011
Phillip Zorab Symposium	London	March 2011
Educational Supervision	Birmingham	April 2011

for Trainers

7 th Advanced Deformity Meeting	Stockholm	May 2011
NHS Information Governance training	Birmingham	June 2011
SRS Meeting	Louisville	Sept 2011
ICHGCP training level 3	Birmingham	Nov 2011
Deformity Symposium 2011	London	Dec 2011

COURSES AS FACULTY MEMBER

Advanced Trauma Life Support	Birmingham	October 2004
Advanced Trauma Life Support	UCL London	December 2004
Advanced Trauma Life Support	UCL London	June 2005
Advanced Trauma Life Support	UCL London	December 2005
Advanced Trauma Life Support	UCL London	December 2006
Clinical Skills in Spinal Assessment and Management	Birmingham	October 2007
Advanced Trauma Life Support	UCL London	December 2007
Clinical Skills in Spinal Assessment and Management	RCS London	June 2008
Clinical Skills in Spinal Assessment and Management	RCS London	November 2008
Clinical Skills in Spinal Assessment and Management	RCS London	June 2009
Adult Deformity Solutions	Leiden	February 2011

OTHER DUTIES

I am a faculty member for the Clinical Skills in Spinal Assessment and Management Course for the Royal College of Surgeons of England and the Spine Safe Course at Leeds General Infirmary.

I am an ATLS instructor and regularly instruct in trauma management. I have been requested to instruct on the CCrISP course by the Royal College of Surgeons.

In orthopaedics I have been involved in teaching colleagues at both SHO and SpR levels as part of the Deanery teaching program.

I have been an examiner of medical students for the University of Birmingham in communication skills. I have also assessed F2 SHOs in a management role with responsibilities for their clinical roles and education.

In all of my posts I have been involved in the teaching of medical students and junior medical staff.

Whilst at Bedford Hospital I instructed senior nurses in how to take a patient history and examine a patient for the MSc in Nursing.

I have been a manuscript reviewer for the Emergency Medicine Journal.

Outside of medicine I have been a Venture Scout Leader with responsibilities for the instruction and leadership of a group of sixteen year olds.

I am a member of AO faculty.

As part of the Scoliosis Research Society I have served on the Website and E Text committees

OTHER INTERESTS

I enjoy distance running and managed to complete the London Marathon in both 2005 and 2006. Since that time I have focused on cross country and fell running.

I am an avid reader of Military History, specifically from the 20th century, with particular focus on the Falklands campaign and World War II. I have also developed my knowledge of battlefield medical care and how this has changed throughout the last century's conflicts.

I am a member of a local Karate group and regularly take part in sessions with my sons.

CAREER PLANS

I am committed to a career in spinal surgery and more specifically in spinal deformity, both paediatric and adult. To further this aim I have undertaken short educational visits with Professor Lenke, Dr Jeszenszky and Mr Tsirikos.

I am interested in undertaking research in scoliosis in both aspects of basic science and management.

I am a member of the British Association of Spinal Surgeons and have served on the executive committee as the orthopaedic trainee representative.

I am a member of the British Scoliosis Society.

I am a candidate fellow of the Scoliosis Research Society.

REFEREES

Mr P Millner Consultant Orthopaedic Spinal Surgeon Department of Spinal Surgery Leeds General Infirmary Great George Street Leeds LS1 3EX 0113 243 2799 peter.millner@leedsth.nhs.uk Mr D Marks **Consultant Spinal Surgeon** Department of Spinal Surgery Royal Orthopaedic Hospital NHS Trust Bristol Road Northfield Birmingham B31 2AP 0121 685 4000 amanda.nelson@nhs.net Mr J Spilsbury **Consultant Spinal Surgeon** Department of Spinal Surgery Royal Orthopaedic Hospital NHS Trust Bristol Road Northfield Birmingham B31 2AP 0121 685 4000 susan.jones32@nhs.net Mr G Towns **Consultant Neurosurgeon** Department of Neurosurgery Leeds General Infirmary Great George Street Leeds LS1 3EX 0113 243 2799

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