

Research

Our consultants are active participants in medical research. They lecture nationally and internationally keeping them at the forefront of orthopaedic surgery. Below are some of their publications

1. A prospective randomised double-blind study of functional outcome and range of flexion following total knee replacement with the NexGen standard and high flexion components.
Nutton RW, van der Linden ML, Rowe PJ, Gaston P, Wade FA.
J Bone Joint Surg [Br]. Jan 2008;90-B:37-42.
2. Molecular Methods for Improving the Diagnosis of Joint Replacement Infections
P. Gaston, D. Salter, A.H.R.W Simpson
<http://www.show.scot.nhs.uk/cso/index.htm>
3. Cyclic pneumatic soft-tissue compression accelerates the union of distal radial osteotomies in an ovine model
M.J. Challis, P. Gaston, K. Wilson, G.A.Jull, R. Crawford
J Bone Joint Surg [Br]. Mar 2006;88-B:411-415.
4. Recovery of Knee Function Following Fracture of the Tibia Plateau
P. Gaston, E.M. Will, J.F. Keating
J Bone Joint Surg [Br]: Sep 2005;87-B:1233-1236
5. Analysis of muscle function in the lower limb after fracture of the diaphysis of the tibia in adults
P. Gaston, E. Will, R.A. Elton, M.M. McQueen, C.M. Court-Brown.
J Bone Joint Surg [Br]: Apr 2000; 82-B:326-331
6. Acute Compartment Syndrome: who is at risk?
M.M. McQueen, P. Gaston, C.M. Court-Brown
J Bone Joint Surg [Br]: Mar 2000; 82-B:200-203
7. Tibial Fractures. Can Their Prognosis Be Predicted?
P. Gaston, E. Will, R.A. Elton, M.M. McQueen, C.M. Court-Brown
J Bone Joint Surg [Br]: Jan 1999; 81-B:71-76
8. Survival Analysis – A Better Estimate of Recurrent Disc Herniation
P. Gaston, R.W. Marshall.
J Bone Joint Surg [Br]: May 2003; 85-B:535-537
9. Randomised Trial of Buffered Versus Plain Lidocaine for Local Anaesthesia in Open Carpal Tunnel Decompression
A.C. Watts, P. Gaston, G. Hooper.
Journal of Hand Surgery [Br]:Feb 2004; 29B(1):30-31
10. Long-Term Sequelae of Fasciotomy Wounds
A.M. Fitzgerald, P. Gaston, Y. Wilson, A. Quaba, M.M. McQueen.
Br J Plast Surg: Dec 2000; 53(8):690-693

11. Total Hip Replacement in the Young
P. Gaston
'Surgeon's News' – the magazine of the Royal College of Surgeons of Edinburgh.
April 2005
12. Infected Joint Replacements
P. Gaston, AHW Simpson
Surgery 2001; 19(6):152a-152c1.
13. Urethral Duplication and Chordee – a rare association
Lawson G.M. and Scobie, W.G.
British Journal of Urology, May (1990); 65: 545-546.
14. Disc Battery Swallowers – Two Contrasting cases
Lawson G.M. and Scobie W.G.
Scottish Medical Journal, April, (1990); 35; 51-52
15. The Role of the Paediatric Surgeon in Alleged Child Sex Abuse
Lafferty P.M., Lawson G.M., Orr J.D. and Scobie W.G.
Journal of Paediatric Surgery (1990)25: 4: 434-437
16. Repair of Coronal and Sub-coronal Hypospadias – an eight year retrospective study.
Lafferty P.M., Lawson G.M., and Scobie W.G.
J. Royal College of Surgeons of Edinburgh (1990); 35; 228-230
17. Management of Child Sexual Abuse in Edinburgh, 1982-1988
Lawson G.M., Lafferty P.M., Scobie W.G. and Bussutil A.
Medicine, Science, and the Law (1990) 2: 4: 338-344.
18. Cefuroxime Prophylaxis in Proximal Femoral Fractures
Lawson G.M. Littlejohn M.A. Miles R. and Hughes S.P.F.
Int J. Orthop Trauma (1993) 2: 4: 233-236.
19. Bilateral Proximal Humeral Fracture-dislocations and Acetabular Fractures Following Epileptic Seizure.
Lawson G.M. and Nutton R.W.
Int J. Orthop Trauma (1993) 3;1;19-21
20. The Histo-Pathology of Fibrous Flexor Sheath Ganglia.
Lawson G.M. Salter D.M. and Hooper G.
J. Hand Surg. (1994); 19B: 258-260.
21. Sports Fractures of the Distal Radius – Epidemiology and Outcome.
Lawson G.M. Hajducka C. and McQueen MM
Injury (1995); 26: 1: 33-36.
22. A Prospective Audit of Knee Arthroscopy – A Study of the Accuracy of Clinical Diagnosis and Therapeutic Value of 325 Knee Arthroscopies.
Lawson G.M. and Nutton R.W.
23. J. Royal Coll Surg. Edin. (1995) 40: 2: 135-137
24. Angioleiomyomas of the Hand – A Report of 14 Cases
Lawson G.M. Salter D.M. and Hooper G.
25. J Hand Surg (1995); 20B: 2: 479-483
- 26.
- 27.

28. A Comparison of Immediate and Delayed Nerve Repair Using Freeze-Thawed Muscle Grafts in a Large Animal Model
29. Lawson G.M. and Glasby M.A.
30. J Hand Surg (1995); 20B: 663-670.

31. Immediate and Delayed Nerve Repair using Freeze- Thawed Muscle Grafts in Complex Nerve Injuries – Cavitation, Fibrosis and Haematoma
32. Glasby M.A. Fullarton A.C. and Lawson G.M.
33. J. Hand Surg (1997); 22B: 4: 479-485.

34. Immediate and Delayed Nerve Repair using Freeze- Thawed Muscle Autografts in Complex Nerve Injuries – Associated Arterial Injury
Glasby M.A. Fullarton A.C. and Lawson G.M.
J. Hand Surg (1998); 23B: 3: 354-359.

35. Immediate and Delayed Nerve Repair using Freeze- Thawed Muscle Allografts in Complex Nerve Injuries – Associated Long Bone Fracture
Fullarton A.C. Glasby M.A. and Lawson G.M.
J. Hand Surg (1998); 23B: 3: 360 - 354.

36. Peripheral Nerve Reconstruction Using Freeze-Thawed Muscle Grafts: a comparison with Group Fascicular Grafts in a Large Animal Model.
Lawson G.M. and Glasby M. A.
J. Royal Coll Surg Edin (1998); 43: 295-302

37. An in vivo Study of Peripheral Nerves in Continuity: Biomechanical and Physiological Responses to Elongation .
Driscoll P.J. Glasby M.A. and Lawson G.M.
J. Orthop Res. (2002); 20: 370 – 375

38. Glomus Tumour of the knee
Beggs I, Lawson G.M. et al
Am. J. Roentgen. (2003); 181:1590 -92

39. Journal of Bone and Joint Surgery, (2002) 84B, 413 – 417
“Guidewire damage during cannulated screw fixation for slipped capital femoral epiphysis.”
J.E.Robb, M.F.Macnicol, I.H.Annan.
Journal of Paediatric Orthopaedic Surgery B, (2003)

40. Delay increases the need for open reduction of type-III supracondylar fractures of the humerus.
Walmsley PJ, Kelly MB, Robb JE, Annan IA, Porter DE.
Journal of Bone and Joint Surgery 88-B pp 528-30 (2006).

41. Indications for internal fixation of fractures in children.
Annan IH, Moran M.
Current orthopaedics vol 20 pp 241 – 320, (2006). (invited article)

42. COCHRANE REVIEW:
Meta-Analysis of Thromboembolic Prophylaxis after Hip Fracture Surgery (Invited Publication)

43. Prophylaxis using heparin, low molecular weight heparin and physical methods against deep vein thrombosis and pulmonary embolism in hip fracture surgery. (Cochrane Review)
Handoll H.H.G., Farrar M.J., McBirnie J.M., Tytherleigh-Strong G., Awal K.A., Milne

A.A., Gillespie W.J.

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44. 'Revision Instability Surgery After Failed Thermal Capsulorrhaphy'.
J.M.McBirnie and A.Miniaci.
In Operative Techniques in Orthopaedics on 'Treatment of Complex Shoulder Problems.' Eds; Freddie Fu. Vol.13, Issue 4, October 2003 (260-269).
45. Arthroscopic Repair of Full-Thickness Rotator Cuff Tears using Bioabsorbable Tacks.
McBirnie J.M, Miniaci A. and Miniaci S
Arthroscopy; 21(12), 1421-1428, 2005.
46. Cutting-edge design to improve cell viability in osteochondral grafts. Huntley J.S,
McBirnie J.M., Simpson A.H. and Hall A.C.
Osteoarthritis and Cartilage 2005; 13, 665-671.
47. Chondrocyte death associated with human femoral osteochondral harvest as performed for Mosaicplasty. Huntley J.S., Bush P.G., McBirnie J.M., Simpson A.H. And Hall A.C.
J Bone Jt Surg [AM] 2005; 87-A(2): 351-360.
48. Thermal capsulorrhaphy for the treatment of multi-directional instability.
Miniaci A., McBirnie J.M. and Miniaci S
J Bone Jt Surg[Am] 2003; 85-A(12):2283-7.
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50. Court-Brown C.M., McBirnie J.M. and Wilson G. Adult ankle fractures - an increasing problem?
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51. Nutton R.W, McBirnie J.M. and Phillips C. The treatment of chronic rotator cuff impingement by arthroscopic subacromial decompression.
J Bone Jt Surg[Br] 1997; 79(1):73-77.
52. McBirnie J.M. and Burnett R. A traction technique for intramedullary nailing of tibial fractures.
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53. Court-Brown C.M.and McBirnie J.M. The epidemiology of tibial fractures.
J Bone Jt Surg[Br] 1995; 77:417-421.
54. McBirnie J.M., Carnochan F. and Pugh G. Carbon dioxide monitoring as a means to determine whether a tracheo-oesophageal fistula has been adequately sealed by oesophageal intubation using a Wilson Cook Tube.
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55. Christie J., Robinson C.M., Pell A.C.H., McBirnie J.M.and Burnett R.
Transcardiac echocardiography during invasive intramedullary procedures.
J Bone Jt Surg[Br] 1995; 77(3):450-455.
56. The vertebral canal II - Health and academic status, a clinical study. Porter R.W., Drinkall J.N., Porter D.E., Thorp L. Spine 12 907-911 (1987)
57. A significant proportion of patients with osteosarcoma belong to Li-

- Fraumeni cancer families. Porter D.E., Holden S.T., Steel C.M., Cohen B.B., Wallace M.R., Reid R. *J. Bone Joint Surg [Br]*. 74-B 883-886 (1992)
58. Constitutional p53 mutations in a non Li-Fraumeni cancer family. Prosser J., Porter D., Coles C., Condie A., Thompson A.M., Chetty U., Steel C.M., Evans H.J. *Br. J. Cancer* 65 527-528 (1992)
59. Familial breast cancer. Steel C.M., Cohen B.B., Porter D.E. *Seminars Cancer Biol.* 3 141-150 (1992)
60. Breast cancer survival in BRCA1 carriers. Porter D.E., Dixon M., Smyth E., Steel C.M. *Lancet* 341 184-185 (1993)
61. Linkage mapping in familial breast and ovarian cancer; improved
62. localisation of a susceptibility gene on chromosome 17q12-21. Porter D.E., Cohen B.B., Wallace M.R., Carothers A., Steel C.M. *Int. J. Cancer* 53 188-198 (1993).
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63. Recent advances in the genetics of heritable breast cancer. Porter D.E., Steel C.M. *Dis. Markers* 11 11-21 (1993)
64. Linkage of a major breast cancer gene to chromosome 17q12-21: results from 15 Edinburgh families. Cohen B.B., Porter D.E., Wallace M.R., Carothers A., Steel C.M. *Am. J. Hum. Genet.* 52 723-729 (1993)
65. Genetic linkage analysis applied to unaffected women from breast cancer families can discriminate high from low risk individuals. Porter D.E., Steel C.M., Cohen B.B., Wallace M.R., Carothers A., Chetty U., Carter D.C. *Br. J. Surg.* 80 1381-1385 (1993)
66. Breast cancer incidence, penetrance and survival in probable carriers of BRCA1 gene mutation in families linked to BRCA1 on chromosome 17q12- Porter D.E., Cohen B.B., Wallace M.R., Smyth E., Chetty U., Dixon M.M., Steel C.M., Carter D.C. *Br. J. Surg.* 81 1512-1515 (1994)
67. Structural chromosome analysis in peripheral blood lymphocytes of individuals belonging to breast cancer pedigrees suggest an association of genetic instability with a proportion of families not linked to the BRCA1 gene. Porter D.E., Spowart G., Morrison H., Mitchell M., Thompson A.M., Mackay J., Steel C.M., Gosden C.M. *Breast* 3 209-214 (1994)
68. Mutation screening of the EXT1 and EXT2 genes in patients with hereditary multiple exostoses. Philippe C., Porter D.E., Emerton M.E., Wells D.E., Simpson A.H.R.W., Monaco A.P. *Am. J. Hum. Genet.* 61 520-528 (1997)
69. Germline mutations in the EXT1 and EXT2 genes in Korean patients with hereditary multiple exostoses. Park K.Y., Shin K.-H., Ku J.-L., Cho T.-J., Lee S.H., Choi I.H., Philippe C., Monaco A.M., Porter D.E., Park J.-G. *J. Hum.*

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70. The neoplastic pathogenesis of solitary and Multiple Osteochondromas.
Porter D.E., Simpson A.H.R.W. J. Pathol. 188 119-125 (1999)
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71. A clinical and radiographic analysis of osteochondromas and growth disturbance in Hereditary Multiple Exostoses.
Porter D.E., Emerton M.E., Villaneuva-Lopez F., Simpson A.H.R.W. J. Pediatr. Orth. 20 246-250 (2000)
72. Comparison of fluorescent single-strand conformation polymorphism analysis and denaturing high-performance liquid chromatography for detection of EXT1 and EXT2 mutations in hereditary multiple exostoses.
Dobson-Stone C., Lonie L., Cox R., Fraser M., Porter D.E., Simpson A.H.R.W., Monaco A.M.
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73. Hereditary Multiple Exostoses : a qualitative study exploring families' and patients perceptions of disease impact and self-expressed needs.
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74. The Hip in Hereditary Multiple Exostoses.
Porter D.E., Benson M.K.D., Hosny G.A.
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75. BRCA1 and BRCA2 mutations in Scotland and Northern Ireland. The Scottish/Northern Irish BRCA1/BRCA2 Consortium. E Anderson, ... D Porter et. al.
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76. Disease severity and sarcoma risk in Hereditary Multiple Exostoses: A genotype-phenotype study.
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J. Bone Joint Surg. [Br]. 86-B 1041-1046 (2004)
77. Ewing's Sarcoma of the Upper Extremity – Presenting Symptoms, Diagnostic Delay and Outcome.
Simpson P.M.S., Reid R, Porter D.E.
Sarcoma 9 (1/2) 15-20 (2005)
78. Managing childhood orthopaedic abnormalities.
Watts A.C., Porter D.E., Simpson
H. Practitioner. 2005 Nov;249(1676):735-6 (2005)
79. P. J. Walmsley, M. B. Kelly, J. E. Robb, I. H. Annan, and D. E. Porter.
Delay increases the need for open reduction of type-III supracondylar fractures of the humerus.
J Bone Joint Surg [Br] 88-B 528 – 530 (2006)
80. Myositis ossificans progressiva. Miss SL Waller, Mr DE Porter, Dr JS Huntley
Br J Hosp Med 67 606 – 607 (2006)
81. Determination of the mutation spectrum of the EXT1/EXT2 genes in British Caucasian patients with multiple osteochondromas, and exclusion of six candidate genes in EXT negative cases.
Lorne Lonie, Daniel E. Porter, Maria Fraser, Trevor Cole, Carol Wise, Laura Yates,

Emma Wakeling, Ed Blair, Eva Morava, Anthony P. Monaco, Jiannis Ragoussis.
Hum Mut 27 1160 (mutations in brief No 938) (2006)

82. The Association between ulnar length and forearm movement in patients with multiple osteochondromas.
Adam C Watts, J Andrew Ballantyne, M Fraser, A Hamish RW Simpson, Daniel E Porter.
J Hand Surg [Am] 32-A 667-673 (2007)
 83. Endometriosis of the superior gluteal nerve.
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 84. Twentieth century survival from childhood osteosarcoma; trends from 1933 to 2004.
L. Foster , G. F. Dall, R. Reid, H. Wallace, D. E. Porter.
J Bone Joint Surg [Br] 89-B 1234-1238 (2007)
 85. Survival trends in osteosarcoma of the humerus.
A Pillai, K Sokhi, D Porter, R Reid.
Eur J Cancer Care European Journal of Cancer Care, Published article
 86. MRI surveillance after resection for primary musculoskeletal sarcoma
A. C. Watts, K. Teoh, T. Evans, I. Beggs, J. Robb, and D. Porter
J Bone Joint Surg [Br] 90-B 484-487 (2008)
 87. Inflammatory Pseudotumour Causing Femoral Nerve Palsy Two Years Following Metal On Metal Resurfacing of The Hip. A Case Report.
RAE Clayton, I Beggs, D M Salter, H Grant, JT Patton, DE Porter.
J Bone Joint Surg [Am]. 90-A 1988-1993 (2008)
 88. The rate of skeletal maturation in the Scottish population – a comparison across 25 years (1980-2005)
Waller SL, Huntley JS, Porter DE, Williams L, Wilkinson AG.
Journal of Paediatric Orthopaedics [Br] – In press (2008)
 89. Malignant Peripheral Nerve Sheath Tumour in the ischiorectal fossa – a case report.
K Teoh, S Reddy, I Beggs, A Al-Nafussi, J Mander, D Porter. Colorectal Disease – In press (2008)
 90. Pretibial subcutaneous soft tissue lesions presenting to a paediatric orthopaedic clinic.
M Gaston, A Murray, D E Porter.
J Paed Orthop [Br] – In press (2008)
 91. M.D. THESIS :
'STUDIES ON THE GENETIC EPIDEMIOLOGY OF HERITABLE BREASTCANCER.' Porter D.E.
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- BOOK CHAPTER AUTHOR AND EDITOR
92. 'Molecular Genetics for General Surgery'. Smyth E.H., Porter D.E. In :
 93. 'Surgical Principles'. Ed: Irving Taylor & Stephen J Karran. Publ: Arnold, London, 1996.

94. Femoral Shaft'. Porter D.E. In : 'Classification of Musculoskeletal Trauma'.

95. Eds: Paul Pynsent, Jeremy Fairbank, Andrew Carr. Publ: Butterworth Heinemann, Oxford, 1999.
96. Hereditary Multiple Exostoses and Cancer Risk'. Porter D.E., Simpson A.H.R.W. In : 'Familial Cancer and Prevention; A New Strategy Toward Cancer Control'. Eds: Joji Utsunomiya, John J. Mulvihill, Walter Weber. Publ: J.Wiley & Co., Baltimore, 1999.
97. 'Laboratory Investigations for Low Back Pain'. Porter D.E. In : 'Management of Low Back Pain in Primary Care'. Eds: Richard Bartley & Paul Coffey. Publ: Butterworth Heinemann, Oxford, 2000.
98. Traumatic Hip Dislocation. Service Personnel and Veterans Agency. Publication. Synopsis of Causation. Evans G, Porter D.E. (2007)
http://www.veterans-uk.info/pdfs/synopsis/hip_dislocation.pdf
99. 'Textbook of Orthopaedics Trauma and Rheumatology': Eds: Luqmani R.A., Robb J., Porter D.E., Keating J.K. ISBN: 978-0-7234-3389-7 Elsevier (2008)
100. Churchill's Pocketbook of Orthopaedics, Trauma and Rheumatology'. Eds: Duckworth A., Porter D.E., Ralston S. ISBN: 978-0-443-06849-2 Elsevier. Release date November 2008

OTHER PERIODICAL / PUBLICATION AUTHORSHIP

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102. Self-Assessment MCQs for the AFRCSEd in Surgery in General, (questions on musculoskeletal neoplasia). Publ: Department of Education of the Royal College of Surgeons of Edinburgh, 1998.
103. 'Early Management of CNS Injury' chapter in Early Trauma and Critical Care Course Manual, Royal College of Surgeons of Edinburgh, 1999.
104. 'Contact-a-Family' (CaF) Directory of Specific Conditions and Rare Syndromes in Children with their Family Support Networks (Specialist contribution on Hereditary Multiple Exostoses and various others). CaF, (<http://www.cafamily.org.uk/home.html>) 1998-2006.
105. McBirnie J.M., Court-Brown C.M.and McQueen M.M. Early open reduction and bone grafting for unstable fractures of the distal radius. J Bone Jt Surg[Br] 1995; 77(4):571-575.
106. Brewster N., Guthrie C. and McBirnie J.M. CRP levels as a measure of surgical trauma - a comparison of different general surgical procedures. J.R.Coll.Surg.Edinb 1994; 39:86-88.
107. Proximal femoral replacement in patients with non-neoplastic conditions. J Bone Joint Surg Am. 2007 May;89(5):1036-43
Parvizi J, Tarity TD, Slenker N, Wade F, Trappler R, Hozack WJ, Sim FH
108. Early Outcome of Revision Hip Arthroplasty Using Uncemented, Modular, Fluted Femoral Stems
Parvizi J, Vegari D, Rapuri VR, Wade FA, Hozack WJ.
J Bone Joint Surg (Am) (Accepted)
109. Revision Hip Arthroplasty for Late Instability Secondary to Polyethylene Wear.
Clin Orthop Relat Res. 2006 May 2

Parvizi J, Wade FA, Rapuri V, Springer BD, Berry DJ, Hozack WJ.

110. Femoral Perforation Complicating Contemporary Uncemented Hip Arthroplasty
Wade FA, Parvizi J, Sharkey PF, Purtill JJ, Hozack WJ
J Arthroplasty. 2006 Apr;21(3):452-5. PMID: 16627158
111. Isolated Acetabular Polyethylene Exchange Through the Anterolateral Approach.
Wade FA, Rapuri VR, Parvizi J, Hozack WJ.
J Arthroplasty. 2004 Jun;19(4):498-500.
112. The Impact of Daycase Surgery on GP Services
Wade FA, Makhdoomi KM, Turner AR
The Journal of One Day Surgery. 1997–98;7 (3), 15–16.

Invited Publications

Editorials

113. Digital Imaging in Trauma and Orthopaedic Surgery
Wade FA, Oliver CW, McBride K.
The Journal of Bone and Joint Surgery Volume 82-B: Aug;82(6):791-4
114. Living with digital imaging.
Wade FA, Oliver CW.
Clinical Orthopaedics. 2004 Apr;(421):25-8

Book Chapters

115. Removal Of Components And Cement
WJ Hozack, FA Wade
In: The Adult Hip
Edited by JJ Callaghan, AG Rosenberg and HE Rubash
Lippincott–Raven Publishers, Philadelphia
116. The Tapered Stem
PF Sharkey, FA Wade
In: Master Techniques In Orthopaedic Surgery – The Hip
Edited by RL Barrack, AG Rosenberg 0-7817-4634-5
Lippincott–Raven Publishers, Philadelphia