

# Curriculum vitae

Francis Michael Brooks

MB ChB, MsC Health Sciences(Ortho),  
FRCSEd(T+O)

Consultant Orthopaedic Surgeon

Personal Details

<b>Name</b>	Francis Michael Brooks
<b>GMC Number</b>	6129519
<b>CCT</b>	October 2015 Trauma and Orthopaedics
<b>Indemnity</b>	MPS 315199

## **Education/Qualifications**

April 2014	FRCSEd(T+O)
January 2013	Warwick University Master of Science in Health Sciences (Trauma and Orthopaedics)
May 2008	MRCs Part B
2000-2005	University of Dundee, Medical School Bachelor of Medicine and Bachelor of Surgery
1992-1999	St Edward's College, Liverpool 4 A-Levels (Chemistry A, Biology B, Christian Theology B, General Studies B) 10 GCSEs (1 A*, 5 A, 4 B)
September 2018	Level 7 CMI certificate in Leadership

## **Awards**

### **BOA National Clinical Leadership Program**

Awarded one of 4 sponsored UKSSB places on the BOA Clinical Leadership Program for 2017-2018

### **Best Mini Podium presentation**

BASS Salford, April 2017

### **BASS Presidential Travelling Fellowship March 2017**

Awarded Presidential Travelling fellowship to visit centres in Dublin, Belfast, Oxford and Stoke Mandeville.

### **Robert Johnson Prize for Best Presentation by a trainee**

Australia Spine Society Melbourne April 2016

“Minimally Invasive Stabilisation versus traditional Stabilisation for fractures of the Ankylosed spine’

**Best poster prize at Welsh Registrars day**

Cardiff, July 2013

“YouTube a source of patient education on Lumbar discectomies”

**Royal Gwent Travelling Fellowship**

2 weeks Observorship in Vancouver, May 2013

**Inaugural Bluespier Research Prize**

South West Orthopaedic Club, May 2012

## **Funding**

1. Received £1500 from Orthos Ltd for travel Costs to Global Spine Congress in Hong Kong.
2. £500 from Boehinger 2011 for Master’s Degree

## **Employment**

### **Foundation Programme**

Aug 05- Dec 05	F1 general medicine, Ninewells hospital, Dundee. Involved in the care of GI medical patients. Carried arrest bleep and involved in cardiac arrest team. On call responsibilities for the general medical take.
Dec 05- Mar 06	F1 Orthopaedics, Ninewells Hospital, Dundee. Involved in the care of general and elective orthopaedic patients.
Apr 06- Jul 06	F1 Neurosurgery, Ninewells hospital, Dundee. Involved in the care of neurosurgical patients with spinal and neurological conditions. Involved in the management of those patients admitted to Neurosurgical HDU.
Aug 06-Dec 06	F2 General Medicine, Ninewells Hospital, Dundee, Worked in Stroke medicine. Involved in on-calls for cardiology.
Dec 06- Mar 07 Infirmary, Tayside.	F2 Accident and Emergency, Ninewells and Perth Royal Worked in A+E and gained good experience in management of common problems with fractures and trauma.

Apr 07- Jul 07 F2 General Surgery, Ninewells Hospital, Dundee, Worked in Vascular surgery and general surgical on-calls. Gained basic surgical experience.

### Core Surgical Training

Aug 07- Dec 07 SHO Orthopaedics, Morriston Hospital, Swansea  
Worked for foot and ankle and paediatric orthopaedic teams. Gained experience in basic surgical skills. Involved in audit on management of foot and ankle fractures.

Dec 07- Mar 08 Senior house officer general Surgery, Morriston hospital, Swansea, Worked in Vascular surgery. Gained experience in basic surgical skills

Apr 08- Jul 08 Senior house officer plastic Surgery, Morriston hospital Swansea, Involved in the general care of plastic surgical patients. Gained experience in basic plastic surgery.

Aug 08- Jan 09 Senior house officer Spinal Surgery, University Hospital of Wales, Cardiff,  
Care of trauma spinal patients and scoliosis patients at UHW.

Feb 09- Jul 09 Senior House officer general Orthopaedics, University Hospital of Wales, Cardiff. Involved in the care of trauma patients . Gained experience in theatre and basic trauma surgery.

### Specialist Registrar Trauma and Orthopaedics

Aug 09- Jan 10 Lower Limb Arthroplasty, Princess of Wales Hospital, Bridgend . Involved in the care and management of both elective and trauma patients. Involved in research on Iforma knee

Feb 10- Jul 10 Lower Limb Arthroplasty, Princess of Wales Hospital, Bridgend. Involved in the care and management of both elective and trauma patients. Involved in research on Iforma knee device

Aug 10- Jan 11 General Orthopaedic Registrar, University Hospital of Wales, Cardiff. Gained experience in the management of elective and trauma patients particularly those with shoulder and knee injuries. Involved in the service evaluation of patients treated with PHILOS plating.

Feb 11- Jul 11 Hand Orthopaedic Registrar, University Hospital of Wales, Cardiff, Involved in the care and management of hand trauma patients. Involved in an audit of hand wound washouts.

Aug 11- Jan 12 Spinal Orthopaedic Registrar, University Hospital of Wales, Cardiff, Involved in the care and management of spinal patients, including scoliosis patients at a tertiary referral centre. Involved in research and audit looking at MSCC patients. Involved in the provision of undergraduate medical education.

Feb 12- Jul 12 Hips, Paediatrics and Foot and Ankle Paediatric Orthopaedic registrar Involved in the care and management of paediatric trauma and orthopaedics. Involved in teaching of F1 junior doctors during this post.

Aug 12- Jan 13 Foot and Ankle Registrar, Royal Gwent, Newport  
Working for Mr Kartik Hariharan. Exposure to complex foot and ankle surgery

Feb 13- Aug 13	Shoulders, Knees and Spine Orthopaedic Registrar, Royal Gwent, Newport. Working for Mr Greg Jones and Mr Huw Pullen. Exposure to basic spinal surgery and shoulder surgery
Aug 13-Jan 2014	Orthopaedic Registrar working in Royal Gwent Hospital, Newport. Working for Mr Phil Alderman and Mr Paul Roberts, Exposure to primary and revision arthroplasty surgery Orthopaedic registrar.
Feb14- Jul14	Orthopaedic registrar working in the Robert Jones Agnes Hunt Orthopaedic Hospital, Oswestry. Working for Mr Jayesh Trivedi, working in correction of complex spinal deformity and exposure to cervical and lumbar spinal procedures.
Aug 14- Feb 2015	Orthopaedic Registrar working in the Royal Gwent hospital. Working for Mr Cordell- Smith in adult spinal surgery and general orthopaedic trauma. Performed research on the admission of patients with back pain.
Feb 15- Jul 15	Orthopaedic Registrar working in the Royal Gwent Hospital. Working for Mr Manoj-Thomas in adult spinal surgery. Exposure to spinal trauma as well as general Adult trauma.
Jul-15-June 16	Post CCT Spinal Fellow and Clinical Lecturer Royal Adelaide Hospital, Australia. Under the supervision of Prof Freeman. Exposure to Degenerative and paediatric spinal clinics.
Aug 16- June 17	Post CCT Spinal Fellow at the Royal Devon and Exeter hospital. Working under the supervision of Messer's Hutton, Chan, Stokes and Khan. Exposure to complex spinal work including deformity, tumour and trauma. Locum consultant oncalls.
July 17 -Dec-19	Consultant Spinal Surgeon, Royal Gwent Hospital, Newport, Wales
Jan 20- Present	Consultant Spinal Surgeon post at University Hospital of Wales, Cardiff

## Research experience

### Current Projects

- Currently conducting a QI project on the use of telephonic follow up for Spinal injection patients.

## Publications

### Spinal

Brooks F, Lau S, Baddour E, Rao P, Bhagat S, et al. A thromboprophylaxis in spinal surgery - Current UK Practice. J Spine 2012. 1:121.doi:10.4172/2165-7939.1000121.

Fawi H, Brooks F, Thomas A, Ahuja S. Unusual presentation of a Lumbar facet joint septic arthritis mimicking a sports injury. A Case report . Internet Journal of Spine Surgery. 8(1).

Brooks F, Lawrence H, Jones A, McCarthy M. YouTube as a source of patient information for lumbar discectomy. Ann R Coll Surg Engl. 2014 Mar; 96(2):144-6

Brooks F, A Clark, R O'Neil, C James, C Power, M Gillett, S Tindall, G Abdulrahman, C Murray, S Ahuja. A Multi-Centre Audit of secondary assessment of Polytrauma patients suspected of Spinal Injury. Eur J Orthop Surg Traumatol. Jul 2014; 24(1): 215-219

F Brooks, A Ghatahora , MC Brooks, H Warren , L Price, P Brahmabhatt P, De Vauvert S, John C, Farnworth E, Sulaiman E, Ahuja S. Management of Metastatic Spinal Cord Compression: Awareness of NICE guidance. Eur J Orthop Surg Traumatol .2014;24(1): 255-259

F Brooks, V Shanbhag, A Ghandour, J Howes, P Davies, K Lyons, S Ahuja. Should a lumbar MRI for back pain routinely include the sacro-iliac joint? Acta Orthop Belg 2014; 80(4): 464-467

Lee YC, Brooks F, Sandler S, Yau YH, Selby M, Freeman B. Most Cited papers in Cervical Spine Surgery. Int Spine Journal. 2017 Jun 28;11:19.

### Papers Under review

Brooks F, RD Fraser. Effect of the Abdominal Musculature on the development of Degenerative Spondylolisthesis Submitted to European Spine Journal

## Orthopaedics

Brooks FM, Carpenter EC, Williams P. Surfers Ankle: A bony spur on the talar neck. BMJ Case Rep 2009.

Brooks F, Akram T, Roy S, Pemberton D and Chandatrey A. Early results with a patient specific Interpositional Knee Device. Acta Orthop Belg 2012; 78(4):500-5.

Brooks F, Paringe V, Tonge A, Lewis J and Mohanty K. Patient estimates of health care cost in trauma and Orthopaedics. Eur J Orthop Surg Traumatol. 2013; 23(6):639-42.

Brooks F, Hariharan K. The Rheumatoid Forefoot. Curr Rev Musculoskeletal Med 2013; 6(4):320-7

Brooks FM, Carpenter C, Gajraj M, O'Doherty D, Thomas P, Boyce D. Necrotising fasciitis in neo-nates and infants. Welsh Paediatric journal September 2012

Bayley M, Brooks F, Tong A, Hariharan K. The 100 most cited papers in foot and ankle surgery. Foot 2014; 24(1):11-16

## Abstracts

King AC, Morgan AC, Brooks F. Trauma operation notes: Does a proforma improve the quality of documentation? International Journal of Surgery 2012;10(8):S87.

King AC, Brooks F, Williams R. Review of Philos plate fixation in proximal humerus fractures. British Trauma Society Annual scientific Meeting, Leeds 2012. Abstract P2A. 20:78.

King AC, Morgan AC, Brooks F. Trauma operation notes: Does a proforma improve the quality of documentation? British Trauma Society Annual scientific Meeting, Leeds 2012. Abstract P21.2:130.

FM Brooks, A Clark, R O'Neil, C James, C Power, M Gillet, S Tindall, G Abdulrahman, C Murray S Ahuja. A Multi Centre Audit of Secondary Assessment of polytrauma patients suspected of Spinal injury in South Wales, Eur Spine J (2012) 21 (Suppl 2):S256

FM Brooks, C Wigstaff, K Hammer, S Ahuja. S1 Nerve Root Blocks: A simple and Reproducible Method. Eur Spine J (2012) 21 (Suppl 2):263

F Brooks, B Hickey, A Gul, J Cordell Smith, S Ahuja. Peg fracture: A Spinal neck of femur? Eur Spine J (2013) 22 (Suppl 1): 66

F Brooks, H Al Madfai, S James, S Ahuja. Does Chronicity of symptoms predict outcome of nerve root blocks? Eur Spine J (2013) 22 (Suppl 1):S68

## Podium Presentations

### Spinal

#### International

FM Brooks, S James, S Ahuja. Does Chronicity of symptoms predict outcome from nerve root block? Global Spine Congress, Hong Kong, April 2013

FM Brooks, M Royle, P Davies. Early clinical results using a novel bone graft , Global Spine Congress 2013

FM Brooks, YH Yau. Is there a standard for operative magnification for simple discectomy? Global Spine Congress, Milan May 2017

FM Brooks, YC Lee, D Roy, M Selby. Management of unstable fractures of the Ankylosed spine using a minimally invasive surgical technique: A comparative Cohort Study. *Global Spine Congress, Milan , May 2017*

#### National

FM Brooks, A Clark, R O'Neil, C James, C Power, M Gillet, S Tindall, G Abdulrahman, C Murray S Ahuja. A Multi Centre Audit of Secondary Assessment of polytrauma patients suspected of Spinal injury in South Wales, Newcastle, Britspine 2012

FM Brooks, C Wigstaff, K Hammer, S Ahuja. S1 Nerve Root Blocks: A simple and Reproducible Method. Newcastle, Britspine 2012

**FM Brooks, S James, S Ahuja, Does Chronicity of symptoms predict outcome from nerve root block?** British Association of Spinal Surgeons, Norwich, March 2013

**FM Brooks, B Hickey, J Cordell- Smith, S Ahuja . Peg fractures: A spinal neck of Femur,** British Association of Spinal Surgeons, Norwich, March, 2013

**N. Verghese, F Brooks, Panwalker P, Mehta J, I Pallister, Clearing the C spine in the Obtunded Patient: A national survey,** British Association of Spinal Surgeons, March 2013

**FM Brooks, C Spolton-Dean, G Okwerekwu, A Khurana, A Manoj-Thomas, J Cordell-Smith.** The Burden of back pain, BASS Bath 2015

**FM Brooks, YC Lee, D Roy, M Selby. Management of unstable fractures of the Ankylosed spine using a minimally invasive surgical technique: A comparative Cohort Study. Awarded Best Presentation by a Trainee.** Spine Society of Australia, Melbourne April 2016

**FM Brooks, D Roy, M Selby. Pedicle screw fixation, reduction and stabilisation for thoraco-lumbar fractures without major neurological deficit: A comparison of minimally invasive and open techniques.** Spine Society of Australia, Melbourne April 2016

**FM Brooks, YH Yau. Is there a standard for operative magnification for simple discectomy?** Spine Society of Australia, Melbourne April 2016

## Local

**FM Brooks, S Ahuja . Should Health economists recommend Nerve Root Blocks?** Welsh Registrar's Day, Cardiff 2012

## Orthopaedics

### International

**FM Brooks, T Akram, S Roy, D Pemberton, A Chandatreya. Early use of an Interpositional Knee Device.** Pan-Celtic meeting, Kilarney 2010

### National

**FM Brooks, T Akram, S Roy, D Pemberton, A Chandatreya. Early Experience with the Iforma Knee device presented at BASK Cardiff 2011**



## Local

**FM Brooks, T Akram, S Roy, D Pemberton, A Chandatreya.** Comparative Study of Iforma and UKR, South West Orthopaedic Club, Plymouth 2010

**FM Brooks, EC Carpenter, D O'Doherty, DP Thomas.** Necrotising Fasciitis in Neonates and infants. Welsh Registrars Day, Cardiff 2011

**FM Brooks, A King, R Williams.** Philos Plate: Radiographical Reasons for Failure, Welsh Orthopaedic Society, Abergavenny, 2012

## Poster Presentation

### Spinal

#### International

**FM Brooks, S Ahuja.** Cost -effectiveness of NRB. NASS annual meeting, Dallas October 2012

**FM Brooks, S Ahuja.** Should Health economists recommend Nerve Root Blocks? Global Spine congress, 2013

**FM Brooks, RD Fraser.** Transpedicular Foraminal decompression. A technique for the management of radicular pain from foraminal stenosis. Poster presentation at Spine Week for ISSLs Singapore

**S Gray, FM Brooks.** Metastatic Spinal Cord Compression Information on the Internet. Is the accessibility of resources available on the internet helping, or hindering? Global Spine Congress, Milan 2017

**C Ovenden, F Brooks.** The Quality of YouTube™ Videos on Anterior Cervical Discectomy and Fusion. Global Spine Congress, Milan 2017

#### National

**FM Brooks, S Ahuja .** Should Health economists recommend Nerve Root Blocks? Britspine, Newcastle 2012

**FM Brooks, S Ahuja.** Metastatic spinal Cord Compression- Awareness of NICE guidelines. Britspine and British Orthopaedic Association 2012

**FM Brooks**, MC Brooks, C Chalkin, S Ahuja . Provision of Spinal Orthotics in UK District general Hospitals. British Orthopaedic Association Meeting, Manchester, 2012

**FM Brooks**, M Royle, P Davies. Early clinical results using a novel bone graft, British Association of Spinal Surgeons, Norwich, March 2013

**F Brooks**, H Lawrence , A Jones ,M McCarthy. YouTube as a source of Patient education for Lumbar discectomy. BASS 2013

**F Brooks** , M McCarthy. The Patient Health Questionnaire (PHQ9) and Generalised Anxiety Disorder Questionnaire (GAD7) in the Spinal Surgery Out Patient Setting: A Comparison to Visual Analogue Score, Oswestry Disability Index / Neck Disability Index and Disability Benefit. Society of Back Pain research, London 2013

**FM Brooks**, M McCarthy. Do patient reported outcomes correlate with a patient's expectations for lumbar back complaints? BASS 2015, Bath

**FM Brooks**, C Spolton-Dean, G Okwerekwu, A Khurana, A Manoj-Thomas, J Cordell-Smith. Does the economy influence back pain admission? BASS 2015, Bath.

**FM Brooks**, C Spolton-Dean, G Okwerekwu, A Khurana, A Manoj-Thomas, J Cordell-Smith. Is there a seasonal variation in Back pain admissions? BASS 2015, Bath

**FM Brooks**, RD Fraser. Transpedicular Foraminaldecompression. A technique for the management of radicular pain from foraminal stenosis. Spine Society of Australia, Melbourne April 2016

## Local

**FM Brooks**, S Ahuja. Metastatic spinal Cord Compression- Awareness of NICE guidelines. Welsh Orthopaedic Society Meeting, Abergavenny 2012.

**FM Brooks**, MC Brooks, C Chalkin, S Ahuja. Provision of Spinal Orthotics in UK District general Hospitals. Welsh Orthopaedic Society Meeting, Abergavenny, 2012

**F Brooks**, H Lawrence, A Jones, M McCarthy. YouTube as a source of Patient education for Lumbar discectomy. Welsh Registrar's Day, Cardiff 2013

## Orthopaedic

### National

A King, A Morgan, **F Brooks**. Trauma Operation Notes: Does a Proforma Improve the Quality of Documentation? British trauma Society meeting, Leeds 2012 and Asit Conference, Cardiff, 2012

### Local

**FM Brooks**, T Akram, S Roy, D Pemberton, A Chandatraya. Early experience with the iforma Knee Device Presented at Welsh Registrars Day 2010

**FM Brooks**, B Singer Early results of High Flexion Knee replacements, Scottish Orthopaedic Meeting, Stirling, 2007

## **Audit**

### **Spinal**

A thromboprophylaxis in spinal surgery - Current UK Practice. Performed 2011 at University Hospital of Wales, Cardiff.

Awareness of NICE guidelines for Metastatic Spinal Cord Compression- National Audit Performed 2013. University Hospital of Wales, Cardiff.

Audit on the Provision of Spinal Orthotics in the UK. Performed 2013 at University Hospital of Wales, Cardiff.

Audit on completion of Secondary survey for patients with suspected spinal cord injury. Performed 2012 University Hospital of Wales, Cardiff.

On-going audit of Metastatic Spinal Cord Compression referrals.

Audit on the quality of Neurological assessment on patients with Suspected Cauda Equina Syndrome- Completed loop Audit. Performed Royal Gwent Hospital, 2015

### **Orthopaedic**

Audit on time to theatre of Ankle fractures. Performed at Morrison Hospital, Swansea, 2007

Audit on Secondary prevention of hip fractures. Performed at Princess of Wales Hospital, Bridgend, 2009

Trauma Operation Notes: Does a Proforma Improve the Quality of Documentation? Completed loop audit. Performed 2010 Cardiff University Hospital

Audit on Hand Wound Washouts Performed 2011 Cardiff University Hospital

Audit of Practice for management of Elderly acetabular fracture at University Hospital of Wales, Cardiff. Performed Cardiff 2012

Audit on Secondary prevention of Osteoporotic fractures in a Fracture clinic Setting, Royal Gwent Hospital , February 2013

Audit on the quality of plasters applied to patients in trauma theatre. Completed loop Audit. Performed 2013 Royal Gwent

### **General**

Case note audit of documentation in Neurosurgical department, May 2006.

## **Courses Attended**

BLS, Dundee medical School, 2005

ALS, Dundee Medical School, 2006

ATLS, Swansea, 2007

CRISP, Cheltenham, 2009

External Fixator Course, Royal Orthopaedic Hospital, Stanmore, 2009

AO Basic Principles, Dublin, 2010

Evidence Based medicine management of Lower back Pain, University of Warwick, July 2010

Evidence Based Medicine of External fixators University of Warwick, September 2010

Evidence based Medicine of intramedullary nails, University of Warwick, December 2010

Evidence Based Medicine of Upper limb Pain University of Warwick, January 2011

Trauma Symposium, Zurich, 2012

Swansea Hand Revision Course, Swansea, 2014

Mock Clinical and Viva Course, Warwick, 2014

Wrightington Basic Science course, Wrightington 2014

e-GCP Online course, 2014

ATLS, Royal Gwent Hospital, Newport 2014

Training the Orthopaedic Trainer, BOA, London 2014

Introduction to Management and Leadership Course, Keel University, 2014

Current Concepts in Spinal Surgery, Cardiff 2015

Globus MERC Cadaveric course, Philadelphia, November 2015

Stryker MIS Spinal Surgery, Basel, September 2017

Globus VIP Philadelphia Visit, September 2017

## **Society Meetings Attended**

Scottish Orthopaedic Club Meeting, Stirling, 2007

SouthWest Orthopaedic Club meeting, Plymouth, 2010

PanCeltic Orthopaedic Club Meeting, Kilarney, 2010

Welsh registrar's Meeting, Cardiff, 2010

British Association of Surgeons of the Knee, Cardiff, 2011

Welsh Orthopaedic Meeting, Glamorgan, 2011

Welsh registrar's Meeting, Cardiff, 2011

BritSpine, Newcastle, May 2012

Welsh Orthopaedic Meeting, Abergavenny, 2012

Welsh registrar's meeting, Cardiff 2012

British Association of Spinal Surgeons, Norwich, 2013

Global Spine Congress, Hong Kong, 2013

Welsh Registrar's meeting, Cardiff, 2013

Society of Back pain research meeting, London 2013

British Association of Spinal Surgeons, Bath, 2015

Spine Society of Australia, Melbourne, 2016

## **CME/ Professional Memberships**

I am a member of the BOA, BASS and NASS. I receive the BJJ and Spine journal. I use electronic databases such as PubMed and Embase to read other spinal publications such as European spine journal and the Spine

## **Responsibility/Management**

- 2004-2005 Secretary for Dundee University Medics Football team.
- 2005 F1 Representative for Ninewell's Hospital.
- 2013 Associate editor for Spines for the Welsh Orthopaedic Journal
- 2014 Member of WelshBone Committee
- 2015 Rota co-ordinator Spinal Unit, Royal Adelaide Hospital.
- 2016 Rota Co-ordinator Spinal Unit, Royal Devon and Exeter Hospital
- 2017 Successful Capital investment bid for Operative Microscope at the Royal Gwent Hospital, Newport
- 2018 On the Steering committee for MSCC pathway for South East Wales

## **Teaching Experience**

- 2005-2007 Ward based teaching of medical Students
- 2011 Lectures on Spinal anatomy to Cardiff Medical Students
- 2012 Supervisor for Special Study module for Cardiff Medical students
- 2014 Performed teaching to Core surgical trainees at Oswestry
- 2014 Performed teaching session on PROFHER trial at Welsh Registrars teaching
- 2015 Performed teaching on Spinal disc disease and spinal stenosis. Welsh Registrars teaching
  - Performed teaching on Current Concepts Course on Natural history of spondylolysis and Risk of slip progression in spondylolisthesis & Sacral parameters and Spondylolisthesis
  - Performed teaching on Spondylolysis at Welsh Registrars Teaching
- 2015- Present Involved in delivery of lectures to Medical students as part of their undergraduate course. Involved in teaching of medical students on the ward and in theatre. Currently over viewing two medical students research interests.
- 2018 Faculty on FRCS Spinal Course, Cardiff, January 2018
- 2018 Faculty for Stryker Nurse and ODP spine course, January 2018

## **Information Technology**

I am competent in the use of Microsoft word and excel. I have used PowerPoint regularly for teaching and presentation purposes.

My work for my MSc has helped me to become competent in the use of electronic journal databases. My research has exposed me to the use of statistical software such as SPSS. This has improved my understanding of basic statistics.