

CURRICULUM VITAE

Last name : Kannan
First name : Vijayaraj
Age : 40 years
Sex : Male
Date of Birth : 11.04.1974
Address for correspondence : C4 Praveen Vajra Apts
68 McNichols Road
Chetpet
Chennai 600031,India
Clinic Address : Texas Sports & Joint Clinic
B3 Ground Floor, PA Towers
218(Old no 869) P H Road
Kilpauk, Chennai 600010,India
Phone : 80560 23632
044 25322556
E-mail : drkvraj@gmail.com
Web : chennaisportsandjoint.com

QUALIFICATIONS

American Board Fellowship (ACGME) : **Sports Medicine**
(2009-2010) University of Texas Medical
Branch, Houston, USA
American Board Fellowship (ACGME) : **Adult reconstruction**
(Advanced complex Lower limb
joint replacements)
(2008-2009) The Methodist Hospital & Weil
Cornell Medical College,
Houston, USA
MD (Navigation & Passive Robotics)
(2005 -2008) : Imperial College London

FRCS (Orth) PART I

(2007) : Intercollegiate Specialty Boards

MS (Orth)

(1999-2002) : Madras Medical College,
Chennai, India.

MBBS

(1991-1997) : Madras Medical College,
Chennai, India.

ACADEMIC & SURGICAL ACHIEVEMENTS

- TNOA Best Poster Award – “Radiological & Functional Outcomes following Modified Open Latarjet Procedure for Recurrent Anterior Shoulder Instability”, TNOACON 2014
- First Surgeon to be officially trained in Robotic Unicompartmental Arthroplasty(Makoplasty) in India
- Awarded Best paper “ Navigation reduces learning curve in Hip Resurfacing” , Annual Orthopaedic Trainees Conference, St Mary’s Hospital, London, Dec 2006
- Highest marks awarded in MS (Orth) Part II theory 2002
- Highest marks awarded MS (Orth) Part I , MMC & Deemed University 2000
- General Proficiency awarded SSLC and HSC
- State rank in Mathematics SSLC (Anglo Indian)

PROFESSIONAL AFFILIATIONS

- Candidate member, AOSSM (American Orthopedic Society of Sports Medicine)
- Candidate member, AANA (Arthroscopic Association of North America)
- Associate member, Orthopaedic Research Society
- Member, International Computer Assisted Orthopaedic Surgery
- Member, CAOS UK
- Member, Indian Orthopaedic Association
- Member, Tamilnadu Orthopaedic Association
- Member, Indian Arthroscopy Society

CONFERENCES ATTENDED

- TNOACON 2014, Chennai
- IASCON 2013 Mumbai
- Arthrochennai 2013 , Chennai June 2013
- IOACON Chennai ,Dec 2012
- CASM Jaipur, Nov 2012
- Advanced shoulder arthroscopy meeting,Hongkong,Oct 2012
- TNOACON annual conference Feb 2012
- Advanced Shoulder Arthroscopy meeting , San Antonio, TX, USA 2011
- IASCON annual conference, Chennai Sep 2010
- OASISCON annual conference, Chennai Aug 2010
- AAOS annual meeting, New Orleans LA, Mar 10 -13, 2010
- AAHKS conference , Dallas, TX , November 2009
- AAOS annual meeting, Las Vegas NV, Feb 25-Feb 28 2009
- AAHKS conference , Dallas, TX , November 2008
- EFORT annual congress, Nice ,France May 2008
- CAOS International meeting, Heidelberg, Germany , June 2007
- EFORT Annual Congress, Florence , Italy , May 2007
- 2nd Annual CAOS UK conference, London, UK, March 2007
- AAOS annual meeting, San Diego, California Feb 2007
- 53rd Annual meeting of Orthopaedic Research Society, San Diego, USA Feb 11-13, 2007
- Great Debate on early intervention of arthritis in the young, London, Jan 2007
- BOA Annual Conference, Glasgow ,UK, Sep 2006
- 15th European SICOT Trainees meeting, Prague, Sep 2006

- CAOS International meeting , Montreal, Canada June 2006
- London Hip Meeting ,18th May 2006
- 3rd Combined Unicompartmental arthritis meeting, Bristol,UK May 2006
- American Academy of Orthopaedic Surgeons 2006 conference, Chicago,USA March 2006
- British Hip Society Meeting 2006 , Edinburgh UK
- 1st Annual meeting of CAOS UK , Heathrow , London , UK, Feb 2006
- Advances in Hip and Knee Surgery , Stratford- Upon- Avon, UK, Dec 2005
- CAOS UK conference Gillingham , UK on 7th October 2005
- HAC symposium on Uncemented Hip replacement, September 2005
- CAOS International conference held at Helsinki , Finland , June 2005
- Knee Arthroplasty – Engineering Functionality (IMEche) Conference London June 2005

INSTRUCTIONAL COURSES ATTENDED

- 13th Advanced Foot and Ankle Cadaver workshop, Amsterdam Medical Centre June 2013
- Advanced Shoulder arthroscopy course, OLC Hongkong Sep 2012
- Nice Shoulder Course, Nice, France, June 2012
- DePuy Advanced Shoulder arthroscopy cadaver course, Bangkok March 2011
- Hip Arthroscopy Masters course conducted by AANA, AAOS Learning center, Chicago, Illinois July 2010
- Traveling fellowship on Robotic unicompartmental knee replacement (Makoplasty) with Dr Martin Roche, Holy cross Hospital, Ft Lauderdale, Florida July 2010
- Biomet Unicompartmental knee replacement Masters and Advanced course ,Philadelphia, June 2010
- Fellowship completion initiative course to be conducted by Arthrex, Naples, Florida June 2010
- Bioskills training workshop on Robotic Unicompartmental replacement “Makoplasty”, Spinemark, Plano TX May 2010
- Shoulder Ultrasound training course conducted by Dr Don Buford, Newyork, May 2010

- Knee ligament arthroscopy masters course conducted by AANA,AAOS Learning center, Chicago, Illinois Apr 2010
- Shoulder Arthroscopy Masters course conducted by AANA, AAOS Learning center, Chicago, Illinois March 2010
- Mini fellowship on Arthroscopy of hip and shoulder conducted by Smith& Nephew Sep 2009,Andover ,Massachusetts
- AOSSM/AAOS 2009 Sports medicine review course for subspecialty certification, Chicago, Aug 13-15 2009
- Advanced Cardiac Life Support certification ,Houston, May 2009
- Instructional Course Lecture on Surface Arthroplasty of Hip, AAOS San Diego, California, USA, Feb 2007
- London Biomechanics Course, Devonshire place , London October 2006
- Surgical Technique Course on Avon Patello femoral resurfacing, Ravenscourt Park hospital, Sep 2006
- Instructional Course Lecture on Surgical Options for management of Pelvic and Acetabular fractures, AAOS March 2006
- Instructional Course Lecture on Hip Arthroscopy, AAOS March 2006
- Instructional Course Lecture on Periacetabular Osteotomy, AAOS March 2006
- Complete course on Statistics (SPSS) March 27- 31, 2006
- Pelvic Osteotomy Course conducted by British Hip Society, March 2006
- Taylor Spatial Frame Course conducted by Royal London Hospital , London November 2005
- Limb Deformity Course , Baltimore Maryland US Sept 2005
- Course on Ilizarov Circular frame and Orthofix at RNOH Stanmore April 2005
- Basic Arthroscopy Course at RNOH Stanmore November 2004
- ATLS course at RNOH Stanmore July 2004
- AO Basic course at Leeds June 2004
- CME on club foot Childs Trust Hospital, Chennai May 2003.
- 4th National Trauma Management Course by International Association for the surgery of trauma and surgical intensive care 2002.
- International Conference on Knee held at Sri Ramachandra Medical College and Research Institute, Porur, Chennai. Sept. 2002

- Basic Surgical Skills Course conducted by The Royal College of Surgeons of Edinburgh at Mumbai in May 2001
- First Combined Instructional Course held jointly by AAOS & IOA in Nov 2000.
- Hands on workshop on Total Knee Replacement– State of the Art in December 2001.
- AO Seminar on Pelvic fracture conducted by AO International in December 2001.
- Hands on workshop on Spine – Approaches and Pedicle fixation at B.J.M.C. Ahmedabad in December 2001..
- Workshop on Uncemented Total Hip Replacement. Isabel Hospital, Chennai
- Fourth Instructional Course and underwent Basic training in Ilizarov technology in Nov 1999.

CURRENT APPOINTMENT

Associate Professor of Orthopaedics & Traumatology, Melmaruvathur Adhiparasakthi Institute of Medical Sciences (MAPIMS)

Practising as Consultant Arthroscopy and Joint Replacement Surgeon specialising in Adult Shoulder, Hip and Knees

SUMMARY OF PREVIOUS EXPERIENCE

Aug 2009 – July 2010	1 year	Sports Medicine fellowship in University of Texas Medical Branch Houston under Dr Leland Winston
Aug 2008 - July 2009	1 year	Adult Reconstruction fellowship in The Methodist Hospital under Dr Ken Mathis MD, Dr Stephen Incavo MD and Dr Phil Noble PhD
April 2005 – July 2008	3 years	Clinical Research fellow in Orthopaedics at Imperial College of London and The Charing cross Hospital Doing MD(Res) in Computer assisted Hip Arthroplasty at Imperial College London under Prof Justin P Cobb
Jan 2004 – April 2005	16 months	Clinical fellow and Senior House Officer in Orthopaedics at University College of London and The Middlesex Hospital
July 2003- Dec 2003	5 months	Clinical Attachment in Orthopaedics at University College of London and The Middlesex Hospital

Jan 2003- June 2003	6 months	Registrar in Paediatric Orthopaedics at Institute of Child Health , Madras Medical College
May 2002- Dec2002	6 months	Registrar in Orthopaedics at Vijaya Institute of Orthopaedics & Traumatology
July 1999 - Apr. 2002	3 years	Registrar in Orthopaedics & Traumatology, <i>Madras Medical College, Chennai, India.</i>
Jan 1999 - June1999	6 months	Senior House Officer in General Surgery, Madras Medical College, Chennai, India.
July 1998 - Dec 1998	6 months	Senior House Officer in Accident & Emergency Lallubhai Gordhandas Hospital, Ahmedabad, India.
Jan 1998 - Jun 1998	6 months	Senior House Officer in General Surgery, Madras Medical College, Chennai, India.
Jan 1996 - Jan 1997	1 year	Pre-Registration House Officer, Madras Medical College, Chennai, India.

RESEARCH EXPERIENCE

- Co-investigator in the research project on “Prediction of range of motion and estimation of acetabular bone stock with different component orientation in modern hip resurfacing”(Principal investigator Dr Phil Noble)
- Co-investigator in the IRB approved study comparing the contribution of spinal and pelvic motion following hip resurfacing with large metal on metal total hip arthroplasty (Principal investigator Dr Phil Noble)
- Principal investigator in the ethically approved Prospective Randomized Control Study comparing the accuracy between Acrobot navigated hip resurfacing and conventional hip resurfacing involving 40 patients
- Principal Investigator in the Research project on “ Comparison of conventional, CT plan , Imageless and Image based navigation on femoral guide wire insertion for hip resurfacing “ with medical students at Imperial College London
- Co-Supervisor of B.Sc Project titled “ Frames of reference for Proximal femur using CT based algorithm” at Imperial College London
- Co-investigator in the project titled “ Novel CT based algorithm for comparison of preoperative and postoperative assessment of Periacetabular Osteotomy patients
- Research project titled “Analysis on Surgical Management of Pelvic Fractures”, done for a period of 3 years from 1999-2002 as a lead investigator.

INVITED LECTURES

- “Femero Acetabular Impingement - Management options”- Vasanthi Orthopaedic Hospital II Anniversary symposium on Current concepts in Hip Diseases August 2013
- Faculty, Moderator for live surgery and Table instructor for knot tying techniques - Arthrochennai 2013
- “Arthroscopic anatomy of Shoulder”, Arthrex annual meeting Mar 2013
- “Surgical approaches to knee” Basic Total knee replacement workshop IOACON Dec 2012
- “ Meniscal injuries of the knee” Basic Knee Arthroscopy workshop IOACON Dec 2012
- “ ACL injuries – Current concepts” at MAPIMS ,Melmaruvathur, Oct 2012
- “ Shoulder arthroscopy- Current concepts “ at Trichy Ortho Club meet, Sep 2012
- “Navigated total knee replacement – the way to go” Vasanthi Orthopaedic Hospital 1st anniversary symposium on Total knee replacement Aug 2012
- “Sports Injuries of the Shoulder & Knees”, IMA Chetput Branch monthly meeting Feb 2012
- “Introduction to Knee and Shoulder arthroscopy ”,CME on Recent Advances in Orthopaedics, Sep 2011 Dharmapuri, Tamilnadu
- “Imageless and Image based navigated hip resurfacing” OASIS 2010 Chennai Aug 2010

PRESENTATIONS(INTERNATIONAL , NATIONAL & REGIONAL)

- Video Demonstration of Arthroscopic Bankart Repair , TNOACON 2014, Chennai
- Arthroscopic Transportal Anterior Cruciate Ligament Reconstruction – Short Term Results , TNOACON 2014, Chennai
- Radiological & Functional Outcomes following Modified Open Latarjet Procedure for Recurrent Anterior Shoulder Instability , OASISCON 2013, Pondicherry
- Spinal and pelvic motion following hip resurfacing and large metal on metal total hip arthroplasty (AAOS annual meeting ,New Orleans,2010)
- Functional activity following Hip resurfacing arthroplasty and total hip arthroplasty : A critical analysis ,Speciality Day AAOS-AAHKS ,Feb 28 2009, Las Vegas, NV
- Interesting case review on VTE prophylaxis of total joint arthroplasty, AAHKS symposium , Dallas, TX , November 2008
- Computer assisted femoral head resurfacing – A pilot study, CAOS International meet, Heidelberg, Germany, June 2007

- “Cortical Volume Analysis in Total Hip replacement, EFORT annual meeting, Florence ,Italy, May 2007
- Results of Uncemented Total Hip Arthroplasty in Juvenile Idiopathic Arthritis, EFORT annual meeting, Florence ,Italy, May 2007
- “Navigation reduces learning curve in Hip resurfacing”, Royal Society of Medicine , AGM , President Prize , May 2007
- Volumetric Wear Analysis in Total Hip Replacement, 2nd Annual meeting of CAOS UK 2007, London, March 2007
- “Results of comparison of functional activity of Hip resurfacing with Total Hip Replacement”, 15th European SICOT Trainees meeting, Prague
- “Three dimensional CT based algorithm for wear analysis in THR- A clinical study”, 15th European SICOT Trainees meeting, Prague
- “A novel CT based algorithm for accurate estimation of component position in THR” , CAOS International 2006, Montreal, Canada
- “ Analysis of Femoral Head Coverage in patients with Hip Dysplasia following Periacetabular Osteotomy using a novel CT based technique”, CAOS International 2006, Montreal, Canada
- “Early Experience using the Acrobot navigation system of Computer Assisted Hip resurfacing surgery”, CAOS International 2006, Montreal, Canada
- “CT based wear analysis in THR- a clinical study”, Royal Society of Medicine,London May 2006
- “ Evolution of interface in uncemented total hip replacement “, IMeche Conference, June 2005
- “Custom Mega Prosthesis for Distal Femoral Tumours” presented at the Asia-Pacific Musculoskeletal Tumour Society held at Chennai , India on 6- 7 July 2002
- “Surgical Management of Acetabular fractures – A short term follow up” at TNOA Conference held at Kodaikanal on 8th Feb 2003.

POSTERS

- “Radiological & Functional Outcomes following Modified Open Latarjet Procedure for Recurrent Anterior Shoulder Instability” , TNOACON 2014
- “Planned Navigated Hip resurfacing – A pilot study” e- poster at EFORT annual conference, Nice France May 2008
- Gender specific acetabular surgery based upon a a scaled pelvic frame of reference, ORS annual meeting, San Francisco, California, March 2008
- 2 posters in CAOS International meeting, Heidelberg, Germany 2007
- 3 posters CAOS UK meet, London, April 2007

- Navigation shortens learning curve in Hip resurfacing , Annual meeting of British Hip Society, Leeds, March 2007
- Results of Uncemented Total Hip Arthroplasty in Juvenile Idiopathic Arthritis, Annual meeting of American Academy of Orthopaedic Surgeons, Feb 2007
- CT based accurate wear analysis in THR, 53rd Annual meeting of Orthopaedic Research Society, San Diego, Feb 2007
- CT based algorithm for accurate estimation of component position in THR,53rd Annual meeting of Orthopaedic Research Society, San Diego, Feb 2007
- Results of Uncemented Total Hip Arthroplasty in Juvenile Idiopathic Arthritis ; British Orthopaedic Association Annual Meeting ,Sep 2006
- Femoral Component positioning with Acrobot Navigation System- Early Results 6th annual CAOS International conference, Montreal, Canada June 2006
- “Hip Resurfacing – A truly bone conserving procedure” London Hip Meeting, London
- CT based three dimensional wear analysis of Total Hip replacement comparing ceramic and polyethylene bearing surfaces, Institute of Biomedical Engineering, Imperial College London
- Matched pair analysis comparing functional outcome of Hip Resurfacing and Total Hip replacement British Hip Society March 2006.

PUBLICATIONS (INCLUDING ABSTRACTS)

- Arunkumar K, Kannan RM, Karthikeyan C, Suchinder A, **Vijayaraj K**, Tenosynovitis of Extensor Carpi Ulnaris with formation of Rice bodies, Accepted for publication in **Bangkok Medical Journal**
- Elkousy HA, **Kannan V**, Zumwalt , O'Connor DP, Woods GW , Prospective comparison of intraarticular morphine and bupivacaine for postoperative pain management in knee arthroscopy, Accepted for publication in **Orthopedics**
- Gavaskar AS, **Vijayaraj K** Subramanian SM, Intraoperative CT navigation for glenoid component fixation in reverse shoulder arthroplasty **Indian J Arthrop** 2013 Jan;**47(1):104-6**
- **V Kannan**, Richards and A Nakhla. Cortical Volume Analysis in uncemented Total Hip replacement **J Bone Joint Br Proceedings** 2009 Mar;**91-B (Supplement 1): 49**
- **V Kannan** and J.D.Witt. Results of Uncemented Total Hip Arthroplasty in Juvenile Idiopathic Arthritis **J Bone Joint Br Proceedings** 2009 Mar;**91-B (Supplement 1): 50**
- Dandachli W, Nakhla A, **Kannan V**, Iranpour F, Cobb JP Can the acetabular position be derived from a pelvic frame of reference? **Clin Orthop Relat Res** 2009 Apr ;**467(4) 886-93.Cited PubMed;PMID: 18551348**
- Dandachli W, **Kannan V**, Richards R, Shah Z, Hall-Craggs M,Witt J. Analysis of cover of the femoral head in normal and dysplastic hips: new CT based

technique . **J Bone Joint Surg Br 2008;90(11):1428-34. Cited Pubmed; PMID: 18978260**

- Cobb JP, **Kannan V**, Dandachli W, Brust K, Hart A, J Learning to resurface cam type femoral heads with acceptable accuracy and precision- A CT based navigation study” **J Bone Joint Surg Am 2008 Aug;90:57-64 Cited PubMed;PMID: 18676938**
- **V Kannan**, R Heaslip R Richards , V Sauret JP Cobb. Volumetric Wear Analysis in Total Hip Replacement – A novel study **J Bone Joint Br Proceedings 2008 Aug;90-B (Supplement 3): 559**
- **V Kannan**, K Brust, G Thevendran, J P Cobb. Navigation shortens hip resurfacing learning curve. **J Bone Joint Br Proceedings 2008 Aug;90-B (Supplement 3): 547**
- **V Kannan**, J D Witt and T White. Results of comparison of functional activity of Hip resurfacing with Total Hip Replacement. **J Bone Joint Br Proceedings 2008 Jul;90-B (Supplement 3): 318**
- **V Kannan**, J Cobb, R Richards and V Sauret. Three dimensional CT based algorithm for wear analysis in THR- A clinical study”, 15th European SICOT Trainees meeting, Prague. **Acta chirurgiae orthopaedicae et traumatologiae Cechoslovaca. 2007 Apr;74 Suppl 1:7-40**
- Cobb JP, **Kannan V**, Brust K, Thevendran G. Navigation reduces the learning curve in hip resurfacing total hip arthroplasty. **Clin Orthop Relat Res 2007 Oct;463(10):90-7**
- A R W Barrett, B L Davies, M P S F Gomes, S J Harris, J Henckel, M Jakopec, **V Kannan**, F M Rodriguez y Baena, JP Cobb, Computer assisted Hip resurfacing using Acrobot Navigation System. **Proc Inst Mech Eng.2007 Oct;773-85.Cited in PubMed;PMID:18019464**

SURGICAL EXPERIENCE

PERFORMED INDEPENDENTLY

Knee Arthroscopic ACL reconstruction,
Posterolateral corner injuries and partial menisectomies, meniscal repairs
Shoulder arthroscopic procedures
Glenohumeral debridement
Biceps tenodesis,
Sub Acromial Decompression
Distal clavicle resection
Bankart repairs
Rotator cuff repairs
Sports injuries – hamstring tendon repairs, patella tendon repairs, pectoralis major repairs, clavicular fracture fixations
Navigated and Conventional Hip resurfacing arthroplasty,
Navigated and Conventional Primary (cemented and cementless) total hip replacement
Revision Total hip replacement
Navigated and Conventional Primary total knee replacement
Revision Total Knee Replacement

Navigated and Conventional Medial and lateral Unicndylar Knee Replacement

Patellofemoral replacements, High tibial osteotomy

Conventional and navigated total shoulder replacement

Reverse total shoulder replacement

Hemiarthroplasty, plating - humerus & forearm

IM - nailing – femur and tibia

DHS/DCS fixation

Intra articular fracture fixation

External fixator applications for upper limbs and lower limbs

PERFORMED UNDER SUPERVISION

Robotic unicompartmental knee replacement

Hip arthroscopic procedures

Labral debridement and fixation,

Femoral head osteoplasty and removal of loose bodies

PCL tibial inlay technique

MANAGERIAL EXPERIENCE

- Scientific Committee Member, TNOACON 2014
- Developer of the training project "Imperial Navigation Arthroplasty Training System (**INATS**)" for Orthopaedic Surgical trainees
- Organised BSc student practical workshops on Navigation systems 2006,2007 at Imperial College London
- Organised "Precise Hip Arthroplasty – Workshop on Planning and Navigation of Hip Arthroplasty" , April 2007
- Member of the intra and intercollegiate cultural festival committee, organized intra and intercollegiate cultural festivals
- Chief editor of year book
- Editor - Department book on "Special Topics in Spinal Surgery" in undergraduate school
- Multiple intra and intercollegiate Dumb Charade champion.
- Was responsible for organising duty rota for SHOs in MMC, Chennai.
- Competent in using computers for academic (literature search & presentation) and administrative purposes.

TEACHING EXPERIENCE

- Routine clinical skill demonstration and lectures for Year 3 and Year 4 medical students of Imperial College London
- Undertaken Seminars & Lectures for undergraduates at Madras Medical College, Chennai, India throughout the period of Residency (3 years)
- Participated in presentation and analytical discussion in various journal clubs.

REFEREES

- 1. DR LELAND A. WINSTON M.D.**
Director, Sports Medicine Fellowship
The University of Texas Medical School in Houston
6550 Fannin, Suite 2600
Houston, TX 77030
Tel no: 713-441-3460
Fax no: 713-790-2057
- 2. Dr KENNETH B. MATHIS M.D.**
Chairman
Center of Orthopaedic Excellence
Associate Professor of Clinical Orthopaedic Surgery
Weill Cornell Medical College
6550 Fannin, Suite 2500
Houston, TX 77030
Tel no: 713-441-3740
Fax no: 713-790-2141
- 3. DR PHILIP C. NOBLE PH.D.**
John S. Dunn Professor of Orthopedic Research
The Methodist Hospital
Professor of Orthopedic Surgery
Barnhart Department of Orthopedic Surgery
Baylor College of Medicine
6550 Fannin, Suite 2522
Houston TX 77030
Tel No: 713-441-3011
Fax No: 713-790-2214
- 4. DR STEPHEN J INCAVO M.D.**
Section Chief of Adult reconstructive Surgery
Associate Professor of Clinical Orthopaedic Surgery
Weill Cornell Medical College
6550 Fannin, Suite 2600
Houston, TX 77030
Tel no: 713-441-3569
Fax no: 713-790-6614