#### **CURRICULUM VITAE**

#### VINCENT W.S. CHAN, MDCM, FRCPC

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Date of Preparation January 2013

Citizenship Canadian

# **DEGREES & LICENSURE**

1994	Diplomate, Added Qualifications in Pain Management, The
	American Board of Anesthesiology
1992	License, Medical Board of California
1990	Diplomate, The American Board of Anesthesiology
1986	Fellow of the Royal College of Physicians and Surgeons of Canada,
	F.R.C.P.(C), Anaesthesia
1981	License, The College of Physicians and Surgeons of Ontario
1981	National Board of Medical Examiners (U.S.A.)
1980	License of Medical Council of Canada
1980	M.D.C.M., McGill University, Montreal, Quebec
1976	B.Sc., Biochemistry (Honours), McGill University, Montreal

## **ACADEMIC APPOINTMENTS**

# **Present Appointment**

2004-present Professor, Department of Anesthesia, University of Toronto

# Previous Appointments

1998-2004	Associate Professor, Department of Anesthesia, University of Toronto
1995–1998	Assistant Professor, Department of Anesthesia, University of Toronto
1992–1995	Assistant Professor in Residence, Department of Anesthesia, University of
	California, San Francisco
1990–1992	Assistant Professor, Department of Anesthesia, University of Toronto
1988–1989	Lecturer, Department of Anesthesia, University of Toronto

## PROFESSIONAL TRAINING

1987–1988	Clinical Fellow, Pain Management and Regional Anesthesia, Brigham and Women's Hospital, Harvard Medical School, Boston, MA
1986–1987	Clinical Fellow, Department of Anesthesia, Toronto Western Hospital
1983-1986	Anesthesia Resident, Faculty of Medicine, University of Toronto
1981-1982	Resident, Internal Medicine, Toronto General Hospital
1980–1981	Mixed Internship, St. Michael's Hospital

#### **CLINICAL APPOINTMENTS**

1995-present	Active Staff, Department of Anesthesia, University Health Network
1994–1995	Active Staff, Department of Anesthesia, San Francisco General Hospital,
	San Francisco, CA
1992-1995	Active Staff, Department of Anesthesia, Moffitt Long Hospital,
	San Francisco, CA
1988-1992	Active Staff, Department of Anesthesia, Toronto Western Hospital
1982-1983	Associate Staff, Department of Family Medicine, Oakville Trafalgar
	Memorial Hospital, Oakville, Ontario

#### **HONORS & AWARDS**

2012	Honorary Member, Romanian Society of Anaesthesia and Intensive Care
2011	FRCA, Fellowship by Election, The Royal College of Anaesthetists,
	London UK
2011	Mary Burnell Lecturer, Combined Scientific Meeting, Australian and New
	Zealand College of Anaesthetists and Hong Kong College of
	Anaesthesiology

2009	AAPM/Pfizer Visiting Professorships in Pain Medicine Award
2009	Gold Medal Award, Canadian Anesthesiologists' Society
2009	President, American Society of Regional Anesthesia and Pain Medicine
2008	David Fear Award for Continuing Medical Education, Department of
	Anesthesia, University of Toronto
2003	Smiths Medical Canada Ltd Canadian Research Award in Pain Research
	and/or Regional Anesthesia, Canadian Anesthesiologists' Society
1998	Carl Koller Award, American Society of Regional Anesthesia
1996	Research Grant Award, Society of Ambulatory Anesthesia
1977-1978	McGill University, Montreal, Quebec, Canada
1973-1974	University Scholarship
1972-1975	J.W. McConnell Scholarship, McGill University

#### PROFESSIONAL AFFILIATIONS AND ACTIVITIES

#### **International and National Activities**

- 1) Journal, Editorial Board and Grant Reviews
  - Editor, Anesthesia & Analgesia (2006-present)
  - Editor, Regional Anesthesia and Pain Medicine Journal (1999-2010)
  - Editor, Canadian Journal of Anesthesia (2000-2006)
  - Associate Editor, Regional Anesthesia and Pain Medicine Journal (1998–1999)(2011present)
  - Guest Editor, Techniques in Regional Anesthesia & Pain Management (1998)
  - Ad-Hoc Grant Reviewer: Canadian Institute of Health Research, Physicians Services Incorporated (Ontario), Alberta Heritage Foundation For Medical Research (1993present)
  - Ad–Hoc Journal Reviewer: Anesthesiology, Anesthesia and Analgesia, Journal of Clinical Anesthesia, Clinical Journal of Pain, Chest (1991–present)
- 2) American Society of Regional Anesthesia and Pain Medicine
  - Immediate Past President (2011-2013)
  - President (2009-2011)
  - President Elect (2007-2009)
  - Treasurer (2005-2007)
  - Associate Treasurer (2003-2005)
  - Board Member (1999-present)
  - Chair, Annual Meeting Oversight Committee (2012-present)
  - Chair, Management Committee (2002-2003)
  - Chair, Master Class Section, Scientific Program Committee (1997–2003)
  - Member, Finance Committee (2012-present)
  - Member, Audit Committee (2012-present)

- Member, Scientific Program Committee (1997–2011)
- Moderator, Scientific Program (1998)
- Member, Communication Committee (2000-present)
- Workshop Instructor (1988–present)
- Member, One–Day Workshop Program Committee (1998–2000)

#### 3) American Society of Anesthesiologists

- Chair, Education Track Subcommittee on Regional Anesthesia and Acute Pain (2009-2013)
- Vice-Chair, ASA Scientific Content Subcommittee on Regional Anesthesia and Acute Pain (2009)
- Member, Committee on Annual Meeting Oversight (2009-2013)
- Member, ASA Committee on Anesthesia Subspecialties (2007-2010)
- Member, Committee on Regional Anesthesia (2003-present)
- Member, Scientific Content Subcommittee on Regional Anesthesia (2007)

#### 4) International Meetings

- Organizer, International Symposium of Ultrasound for Regional Anesthesia and Pain Medicine (2006-present)
- Member, Local Arrangements Committee, International Society of Regional Anesthesia, Montreal 2000
- Member, International Advisory Committee, Scientific Program, Acute Pain section, the 12th World Congress 2000
- Member, International Advisory Committee, Scientific Program, Regional Anesthesia section, the 12th World Congress 2000

#### 5) International Research Organizations

 Member, Global Perioperative Research Organization, International Anesthesia Research Society (2001-2004)

#### 6) Canadian Anesthesiologists' Society

- Vice Chair, Regional Anesthesia Section (1998–2003)
- Co-Chair, Poster Discussion Session (Regional Anesthesia/Pain), 53rd Annual Meeting (1996)
- Chronic Pain Subcommittee Member, 53rd Annual Meeting (1996)
- Regional Anesthesia Workshop Instructor, 53<sup>rd</sup> Annual Meeting (1996)
- Co-Chair, Poster Discussion Session (Regional Anesthesia/Pain), 53rd Annual Meeting of the Canadian Anesthetists' Society (1996)
- Chronic Pain Subcommittee Member, Canadian Anesthetists' Society Annual Meeting, Montreal, Quebec (1996)

 Regional Anesthesia Workshop Instructor, Canadian Anesthetists' Society Annual Meeting, Montreal, Quebec (1996)

### 7) Ontario Medical Association

 Regional Anesthesia Workshop Instructor, Ontario Medical Association Annual Meeting, Windsor, Ontario (1996)

#### 8) Academy of Medicine

• Co–Chair, Anesthesia Section, Toronto, Ontario (1996–1999)

## **University Professional Activities**

#### 1) University of Toronto

- Chair, Research Committee, Department of Anesthesia (1997–2001)
- Co-Chair, Annual Regional Anesthesia and Pain Medicine Conference, Continuing Medical Education, University of Toronto (1996–present)
- Coordinator, Regional Anesthesia Section, U of T Resident Seminar Series (1997present)
- Examiner, Anesthesia Resident Oral Examination (1996–present)
- Residents' Regional Anesthesia One Day Workshop (1998–present)
- Facilitator, Medical student teaching, Pain: Putting the Person at the Centre, Understanding the issues from molecules to society, University of Toronto Centre of the Study of Pain (2003-2004)

#### 2) University Health Network

- Head, Regional Anesthesia and Pain Program, Department of Anesthesia (2001-present)
- Medical Director, Acute Pain Research Unit (2000-2010)
- Coordinator, Regional Anesthesia and Pain Fellowship Program (1996–2003)
- Director, Regional Anesthesia and Acute Pain Management (1995–2001)
- Coordinator, U of T Resident Regional Anesthesia Elective Program (1995-2003)
- Coordinator, Acute Pain Treatment Service, Toronto Western Hospital (1989–1992)

#### 3) University of California, San Francisco

- Director (Anesthesia), Postanesthetic Care Unit, Clinical Practice Committee, San Francisco General Hospital (1994-1995)
- Coordinator, Epidural Analgesia Service, San Francisco General Hospital (1994–1995)
- Member, Neuroanesthesia Section, Department of Anesthesia (1992–1994)

#### **University Committee Assignments**

- 1) University of Toronto
  - Member, University Promotion Committee, Department of Anaesthesia (1998, 1999, 2002, 2004, 2005, 2007-2012)
  - Member, Department Council, Department of Anesthesia (1997-2001)
- 2) University of California, San Francisco
  - Member, Pain Quality Assurance Committee (1992-1994)
  - Member, Academic Senate (1992–1995)

#### **Hospital Committee Assignments**

- 1) University Health Network
  - Chair, Academic Committee, Department of Anesthesia, Toronto Western Hospital (2006-present)
  - Chair, Anesthesia Academic Committee, Department of Anesthesia (1999–2001)
  - Member, Corporate Pain Committee, University Health Network (2003-2011)
  - Member, Pain Management Committee, The Toronto Hospital (1995–2000)
  - Member, Search Committee for Anesthesiologist–in–Chief (2000)
  - Member, Anesthesia Workload Committee, Department of Anesthesia (1999-2001)
  - Member, Anesthesia Business Unit Committee, The Toronto Hospital (1996–2000)
  - Member, Quality Assurance Committee, Department of Anesthesia (1997–2001)
  - Member, Equipment Committee, Department of Anesthesia (1995–2000)
  - Member, Executive Business Committee, Anesthesia Associates, University Health Network (1996–2003)
  - Business Manager, Anesthesia Associates, Toronto Western Hospital, University Health Network (1996–2003)
  - Member, Pharmacy and Therapeutic Committee, Toronto Western Hospital (1990-1992)
- 2) San Francisco General Hospital
  - Member, Epidural Analgesia Task Force (1994–1995)
  - Member, Pain Management Committee (1994–1995)

#### **TEACHING EXPERIENCE**

#### **GRADUATE EDUCATION**

2002-2005 Facilitator for medical student teaching, Pain: Putting the Person at the

Centre, Understanding the issues from molecules to society, University of

Toronto Centre of the Study of Pain

#### POSTGRADUATE EDUCATION

1998-2005	Residents' Regional Anesthesia One Day Workshop, University of
	Toronto, Toronto, Ontario
1995-present	Residency teaching program, Department of Anaesthesia, University of
	Toronto, Toronto, Ontario
1992-1995	Residency teaching program, Department of Anesthesia, University of
	California, San Francisco
1988-1992	Residency teaching program, Department of Anaesthesia, University of
	Toronto, Toronto, Ontario

#### PROFESSIONAL SOCIETY MEMBERSHIPS

1987–present	American Society of Anesthesiology
1986-present	The Royal College of Physicians and Surgeons of Canada
1985-present	Canadian Anaesthetists' Society
1985-present	American Society of Regional Anesthesia
1985-present	International Anesthesia Research Society
1981-present	Ontario Medical Association
1981-present	The College of Physicians and Surgeons of Ontario
1995–1999	Academy of Medicine, Anesthesia Section
1992–1995	California Society of Anesthesiologist

#### **PUBLICATIONS**

#### Journal Articles

- 1. Lee SH, Kim JM, Chan V, Kim HJ, Kim HI. Ultrasound-Guided Cervical Periradicular Steroid Injection for Cervical Radicular Pain: Relevance of Spread Pattern and Degree of Penetration of Contrast Medium. Pain Med 2013;14:5-13
- 2. Riazi, S, Bril V, Perkins BA, Abbas S, Chan VWS, Ngo M, Lovblom LE, El-Beheiry H, Brull R. Can Ultrasound of the Tibial Nerve Detect Diabetic Peripheral Neuropathy?: A cross-sectional study. Diabetes Care 2012;35:2575-9
- 3. Wong SW, Niazi AU, Chin KJ, Chan VW. Real-time ultrasound-guided spinal anesthesia using the SonixGPS® needle tracking system: a case report. Can J Anaesth 2012;60:50-53

- 4. Endersby R, Albrecht E, Perlas A, Chan V. Semantics, misnomer, or uncertainty: where is the epineurium on ultrasound? Reg Anesth Pain Med 2012;37:360–1.
- 5. Niazi AU, Haldipur N, Prasad AG, Chan VW. Ultrasound-guided regional anesthesia performance in the early learning period: effect of simulation training. Reg Anesth Pain Med 2012;37:51-4.
- 6. Chin KJ, Chan V, Hebbard P, et al. Ultrasound-guided transversalis fascia plane block provides analgesia for anterior iliac crest bone graft harvesting. Can J Anaesth 2012;59:122-3.
- 7. Abdallah FW, Chan VW, Brull R. Transversus Abdominis Plane Block: A Systematic Review. Reg Anesth Pain Med 2012;37:193–209.
- 8. Abdallah FW, Adham AMBF, Chan VW, Kanazi GE. Analgesic Benefits of Pre-incisional Transversus Abdominis Plane Block for Abdominal Aortic Aneurysm Repair J Cardiothorac Vasc Anesth. 2012 Apr 11
- 9. Cubillos J, Tse C, Chan VW, Perlas A. Bedside ultrasound assessment of gastric content: an observational study. Can J Anaesth 2012;59:416-23.
- 10. Macfarlane AJ, Sites BD, Sites VR, et al. Musculoskeletal sonopathology and ultrasound-guided regional anesthesia. HSS J 2011;7:64-71.
- 11. Morfey DH, Chan VW, Brull R. Tripping over perineural catheters. Anesth Analg 2011;113:689-91.
- 12. Chin KJ, Wong NW, Macfarlane AJ, Chan VW. Ultrasound-guided versus anatomic landmark-guided ankle blocks: a 6-year retrospective review. Reg Anesth Pain Med 2011;36:611-8.
- 13. Niazi AU, Mocon A, Varadi RG, et al. Ondine's curse: anesthesia for laparoscopic implantation of a diaphragm pacing stimulation system. Can J Anaesth 2011;58:1034-8.
- 14. Chin KJ, Tse C, Chan V. Ultrasonographic identification of an anomalous femoral nerve: the fascia iliaca as a key landmark. Anesthesiology 2011;115:1104.
- 15. Abdallah FW, Hocking G, Chan VW. Porcine carcass phantom for ultrasound imaging and hands-on practice in needle insertion in the thoracic paravertebral space. Can J Anaesth 2011;58:875-7.
- 16. Prasad A, Yu E, Wong DT, et al. Comparison of sonography and computed tomography as imaging tools for assessment of airway structures. J Ultrasound Med 2011;30:965-72.
- 17. Singh M, Chin KJ, Chan V. Ultrasound-guided transversus abdominis plane (TAP) block: a useful adjunct in the management of postoperative respiratory failure. J Clin Anesth 2011;23:303-6.
- 18. Ganapathy S, Chan V. Regional analgesia and acute pain management: major leaps in small steps? Preface. Anesthesiol Clin 2011;29:xiii-xxiv.
- 19. Perlas A, Davis L, Khan M, et al. Gastric Sonography in the Fasted Surgical Patient: A Prospective Descriptive Study. Anesth Analg 2011;113:93-7.
- 20. Chin KJ, Perlas A, Chan V, et al. Ultrasound Imaging Facilitates Spinal Anesthesia in Adults with Difficult Surface Anatomic Landmarks. Anesthesiology 2011;115:94-101.
- 21. Lee SH, Lee SH, Chan VW, et al. Echotexture and Correlated Histologic Analysis of Peripheral Nerves Important in Regional Anesthesia. Reg Anesth Pain Med 2011;36:382-386.

- 22. Subramanyam R, Vaishnav V, Chan VW, et al. Lateral Versus Medial Needle Approach for Ultrasound-Guided Supraclavicular Block: A Randomized Controlled Trial. Reg Anesth Pain Med 2011;36:387-392.
- 23. Chin KJ, Tse C, Chan V, Tan JS, Lupu CM, Hayter M. Hand motion analysis using the imperial college surgical assessment device: validation of a novel and objective performance measure in ultrasound-guided peripheral nerve blockade. Reg Anesth Pain Med 2011;36:213-9.
- 24. Brull R, Chan VW. The corner pocket revisited. Reg Anesth Pain Med 2011;36:308.
- 25. Brull R, Macfarlane AJ, Parrington SJ, Koshkin A, Chan VWS. Is circumferential injection advantageous for ultrasound-guided popliteal sciatic nerve block?: A proof-of-concept study. Reg Anesth Pain Med 2011;36:266-70.
- 26. Brull R, Prasad GA, Gandhi R, Ramlogan R, Khan M, Chan VWS. Is a patella motor response necessary for continuous femoral nerve blockade performed in conjunction with ultrasound guidance? Anesth Analg 2011;112:982-6.
- 27. McGeary S, Chan V, Brull R. Recognizing dangerous intraneural injection: is it the musician or the instrument? Reg Anesth Pain Med 2011;36:99.
- 28. Chin KJ, Tse CC, Chan V. Practical considerations in preparing the pig carcass spine phantom. Reg Anesth Pain Med 2011;36:91-2.
- 29. Duggan E, Brull R, Chan VW. Reply to Dr. Orebaugh. Reg Anesth Pain Med 2010;35:481-2.
- 30. Bhatia A, Lai J, Chan VW, Brull R. Pneumothorax as a Complication of the Ultrasound-Guided Supraclavicular Approach for Brachial Plexus Block. Anesth Analg 2010;111:817-9
- 31. Sites BD, Chan VW, Neal JM, Weller R, Grau T, Koscielniak-Nielsen ZJ, Ivani G. The American Society of Regional Anaesthesia and Pain Medicine and the European Society of Regional Anaesthesia and Pain Therapy joint committee recommendations for education and training in ultrasound-guided regional anesthesia. Reg Anesth Pain Med 2010;35:S74-S80.
- 32. Sites BD, Macfarlane AJ, Sites VR, Naraghi AM, Chan VWS, Antonakakis JG, Singh M, Brull R. Clinical sonopathology for the regional anesthesiologist: part 2: bone, viscera, subcutaneous tissue, and foreign bodies. Reg Anesth Pain Med 2010;35:281-9.
- 33. Sites BD, Macfarlane AJ, Sites VR, Naraghi AM, Chan VWS, Antonakakis JG, Singh M, Brull R. Clinical sonopathology for the regional anesthesiologist: part 1: vascular and neural. Reg Anesth Pain Med 2010;35:272-80.
- 34. Prasad A, Perlas A, Ramlogan R, Brull R, Chan V. Ultrasound-guided popliteal block distal to sciatic nerve bifurcation shortens onset time: a prospective randomized double-blind study. Reg Anesth Pain Med 2010;35:267-71.
- 35. Moayeri N, van Geffen GJ, Bruhn J, Chan VW, Groen GJ. Correlation among ultrasound, cross-sectional anatomy, and histology of the sciatic nerve: a review. Reg Anesth Pain Med 2010;35:442-9.
- 36. Parrington SJ, O'Donnell D, Chan VWS, Brown-Shreves D, Subramanyam R, Qu M, Brull R. Dexamethasone added to mepivacaine prolongs the duration of analgesia after supraclavicular brachial plexus blockade. Reg Anesth Pain Med 2010;35:422-6.

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- 37. O'Donnell D, Manickam B, Perlas A, Karkhanis R, Chan VWS, Syed K, Brull R. Spinal mepivacaine with fentanyl for outpatient knee arthroscopy surgery: a randomized controlled trial. Can J Anaesth 2010;57:32-8.
- 38. Tan JS, Chin KJ, Chan VWS. Developing a Training Program for Peripheral Nerve Blockade: The "Nuts and Bolts" International Anesthesiology Clinics 2010;48:1-11
- 39. Niazi AU, Ramlogan R, Prasad A, Chan VW. A new simulation model for ultrasound-aided regional anesthesia. Reg Anesth Pain Med 2010;35:320-1.
- 40. Sites BD, Brull R, Chan VWS, Spence BC, Gallagher J, Beach ML, sites VR, Abbas S, Harman GS. Artifacts and pitfall errors associated with ultrasound-guided regional anesthesia: Part II: A pictorial approach to understanding and avoidance. Reg Anesth Pain Med 2010;35:S81-S92.
- 41. Neal JM, Brull R, Chan VW, Grant SA, Horn JL, Liu SS, McCartney CJL, Narouze SN, Perlas A, Salinas FV, Sites BD, Tsui BC. The ASRA evidence-based medicine assessment of ultrasound-guided regional anesthesia and pain medicine: Executive summary. Reg Anesth Pain Med 2010;35:S1-S9.
- 42. Ramlogan R, Manickam B, Chan VW, Liang L, Adhikary SD, Liguori GA, Hargett MJ, Brull R. Challenges and training tools associated with the practice of ultrasound-guided regional anesthesia: a survey of the American society of regional anesthesia and pain medicine. Reg Anesth Pain Med 2010;35:224-6.
- 43. Lupu CM, Kiehl TR, Chan VW, El-Beheiry H, Madden M, Brull R. Nerve expansion seen on ultrasound predicts histologic but not functional nerve injury after intraneural injection in pigs. Reg Anesth Pain Med 2010;35:132-9.
- 44. Chin KJ, Chan V. Ultrasonography as a preoperative assessment tool: predicting the feasibility of central neuraxial blockade. Anesth Analg 2010;110:252-3.
- 45. Chin KJ, Chan VW, Ramlogan R, Perlas A. Real-time ultrasound-guided spinal anesthesia in patients with a challenging spinal anatomy: two case reports. Acta Anaesthesiol Scand 2010;54:252-5.
- 46. Singh M, Chin KJ, Chan VWS, Wong DT, Prasad GA, Yu E. Use of sonography for airway assessment: an observational study. J Ultrasound Med 2010;29:79-85.
- 47. Chin KJ, Chan V. Evaluating outcomes in ultrasound-guided regional anesthesia. Can J Anaesth 2010;57:1-8.
- 48. Myers J, Chan V, Jarvis V, Walker-Dilks C. Intraspinal techniques for pain management in cancer patients: a systematic review. Support Care Cancer 2010;18:137-49.
- 49. Perlas A, Chan V W, Lupu C M, Mitsakakis N, Hanbidge A. Ultrasound assessment of gastric content and volume. Anesthesiology 2009;111:82-89.
- 50. Chin K J, Perlas A, Chan V, Brull R. Continuous infraclavicular plexus blockade. Anesth Analg 2009;109:1347-1348.
- 51. van Geffen GJ, Moayeri N, Bruhn J, Scheffer GJ, Chan VW, Groen GJ. Correlation between ultrasound imaging, cross-sectional anatomy, and histology of the brachial plexus: a review. Reg Anesth Pain Med 2009;34:490-7.
- 52. Manickam B, Perlas A, Duggan E, Brull R, Chan VWS, Ramlogan R. Feasibility and efficacy of ultrasound-guided block of the saphenous nerve in the adductor canal. Reg Anesth Pain Med 2009;34:578-80.

- 53. Sites BD, Neal JM, Chan V. Ultrasound in regional anesthesia: where should the "focus" be set? Reg Anesth Pain Med 2009;34:531-3.
- 54. Brull R, Lupu M, Perlas A, Chan V W, McCartney C J. Compared with dual nerve stimulation, ultrasound guidance shortens the time for infraclavicular block performance. Can J Anaesth 2009; 56:812-8.
- 55. Prasad A, Singh M, Chan V W. Ultrasound imaging of the airway. Can J Anaesth 2009;56:868-9.
- 56. Macfarlane A J, Prasad G A, Chan V W, Brull R. Does regional anaesthesia improve outcome after total hip arthroplasty? A systematic review. Br J Anaesth 2009;103:335-345
- 57. Duggan E, El Beheiry H, Perlas A, Lupu M, Nuica A, Chan V W, Brull R. Minimum effective volume of local anesthetic for ultrasound-guided supraclavicular brachial plexus block. Reg Anesth Pain Med 2009;34:215-218.
- 58. Niazi A U, Prasad A, Ramlogan R, Chan V W. Methods to ease placement of stimulating catheters during in-plane ultrasound-guided femoral nerve block. Reg Anesth Pain Med 2009;34:380-381
- 59. Chin K J, Perlas A, Singh M, Arzola C, Prasad A, Chan V, Brull R. An ultrasound-assisted approach facilitates spinal anesthesia for total joint arthroplasty. Can J Anaesth 2009;56:643-650.
- 60. Chin K J, Macfarlane A J, Chan V, Brull R. The use of ultrasound to facilitate spinal anesthesia in a patient with previous lumbar laminectomy and fusion: A case report. J Clin Ultrasound 2009;37:482-485.
- 61. Macfarlane A J, Arun P G, Chan V W, Brull R. Does Regional Anesthesia Improve Outcome After Total Knee Arthroplasty? Clin Orthop Relat Res 2009;467:2379-2402.
- 62. Suresh S, Chan V W. Ultrasound guided transversus abdominis plane block in infants, children and adolescents: a simple procedural guidance for their performance. Paediatr Anaesth 2009;19:296-299.
- 63. Perlas A, Lobo G, Lo N, Brull R, Chan V W, Karkhanis R. Ultrasound-guided supraclavicular block: outcome of 510 consecutive cases. Reg Anesth Pain Med 2009;34:171-176.
- 64. Sites B D, Chan V W, Neal J M, Weller R, Grau T, Koscielniak-Nielsen Z J, Ivani G. The American Society of Regional Anesthesia and Pain Medicine and the European Society Of Regional Anaesthesia and Pain Therapy Joint Committee recommendations for education and training in ultrasound-guided regional anesthesia. Reg Anesth Pain Med 2009;34: 40-46.
- 65. Perlas A, Chan VW, Brull R. Several "correct" approaches to nerve stimulator-guided popliteal fossa block. Reg Anesth Pain Med 2009;34:624-5.
- 66. Arun P G, Niazi A, Chan V. Ultrasound averts inadvertent injury during internal jugular vein cannulation. Can J Anaesth 2009;56: 85-86.
- 67. Manickam B P, Perlas A, Chan V W, Brull R. The role of a preprocedure systematic sonographic survey in ultrasound-guided regional anesthesia. Reg Anesth Pain Med 2008;33:566-570.
- 68. Chin K J, Perlas A, Chan V W, Brull R. Needle visualization in ultrasound-guided regional anesthesia: challenges and solutions. Reg Anesth Pain Med 2008;33:532-544.

- 69. Chin K J, Chan V W, van Geffen G J. Ultrasound-guided infraclavicular block: the in-plane versus out-of-plane approach. Paediatr Anaesth 2008;18:1279-1280.
- 70. Brull R, Perlas A, Cheng P H, Chan V W. Minimizing the risk of intravascular injection during ultrasound-guided peripheral nerve blockade. Anesthesiology 2008;109:1142.
- 71. Chin K J, Perlas A, Brull R, Chan V W. Ultrasound guidance is advantageous in popliteal nerve blockade. Anesth Analg 2008;107:2094-2095.
- 72. Macfarlane A J, Perlas A, Chan V, Brull R. Eight ball, corner pocket ultrasound-guided supraclavicular block: avoiding a scratch. Reg Anesth Pain Med 2008;33:502-503.
- 73. Chin KJ, Chan V. Ultrasound-guided peripheral nerve blockade. Curr Opin Anaesthesiol 2008;21:624-631.
- 74. Chin KJ, Niazi A, Chan V. Anomalous brachial plexus anatomy in the supraclavicular region detected by ultrasound. Anesth Analg 2008;107:729-731.
- 75. Brull R, Wijayatilake DS, Perlas A, Chan VW, Abbas S, Liguori GA, Hargett MJ, El Beheiry H. Practice patterns related to block selection, nerve localization and risk disclosure: a survey of the American Society of Regional Anesthesia and Pain Medicine. Reg Anesth Pain Med 2008;33:395-403.
- 76. Lo N, Brull R, Perlas A, Chan VW, McCartney CJ, Sacco R, El Beheiry H. Evolution of ultrasound guided axillary brachial plexus blockade: retrospective analysis of 662 blocks. Can J Anaesth 2008;55:408-413.
- 77. Perlas A, Brull R, Chan VW, McCartney CJ, Nuica A, Abbas S. Ultrasound guidance improves the success of sciatic nerve block at the popliteal fossa. Reg Anesth Pain Med 2008;33:259-265.
- 78. Rofaeel A, Peng P, Louis I, Chan V. Feasibility of real-time ultrasound for pudendal nerve block in patients with chronic perineal pain. Reg Anesth Pain Med 2008;33:139-145.
- 79. Tumber P S, Bhatia A, Chan V W. Ultrasound-guided lateral femoral cutaneous nerve block for meralgia paresthetica. Anesth Analg 2008;106:1021-1022.
- 80. Gagliese L, Gauthier LR, MacPherson A, Jovellanos M, Chan VWS. Correlates of Postoperative Pain and Intravenous Patient-Controlled Analgesia Use in Younger and Older Surgical Patients. Pain Medicine 2008;9:299-314.
- 81. Soares LG, Brull R, Chan VW. Teaching an old block a new trick: ultrasound-guided posterior tibial nerve block. Acta Anaesthesiol Scand 2008;52:446-447
- 82. Soares LG, Chan VW. The Rationale for a Multimodal Approach in the Management of Breakthrough Cancer Pain: A Review. Am J Hosp Palliat Care 2007;24: 430-439
- 83. Ladak SS, Chan VW, Easty T, Chagpar A. Right medication, right dose, right patient, right time, and right route: how do we select the right patient-controlled analgesia (PCA) device? Pain Manag Nurs 2007;8:140-145
- 84. Perlas A, Niazi A, Chan V W. Reply to drs. Bollini and cacheiro. [Letter] Reg Anesth Pain Med 2007;32:543-545.
- 85. Perlas A, Chan V, Brull R, Zundert AV. Ultrasound Guided Peripheral Nerve Blocks. CPD Anaesthesia 2007;9:70-78
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#### **Book Chapters**

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#### Abstracts and Presentations

- Parrington SJ, Brull R, Perlas A, Macfarlane A, Chan V. Circumferential Local Anesthetic Spread Speeds the Onset of Ultrasound Guided Sciatic Nerve Block at the Popliteal Fossa. Poster Presentation (A-30) Poster Presentation (A-86) American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April, 2010, Toronto, Canada (Resident Travel Award)
- 2. Brown-Shreves D, Chin K, Vaishnav V, Perlas A, Chan V. Pre-Procedural Ultrasound Imaging Improves Ease of Performance of Spinal Anesthesia in Patients with Difficult Spinal Anatomy. Poster Presentation (S-473) Annual Meeting of the International Anesthesia Research Society, March 2010, Honolulu, Hawaii
- 3. Parrington SJ, Brull R, Perlas A, Macfarlane A, Chan V. Circumferential Local Anesthetic Spread Speeds the Onset of Ultrasound Guided Sciatic Nerve Block at the Popliteal Fossa. Poster Presentation (S-483) Annual Meeting of the International Anesthesia Research Society, March 2010, Honolulu, Hawaii
- 4. O' Donnell DR, Manickam B, Karkhanis R, Chan V, Brull R. Spinal Mepivacaine with Fentanyl for Outpatient Knee Arthroscopy Surgery. Poster Presentation (A-86) American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April, 2009, Phoenix, AZ
- 5. O' Donnell DR, Prasad A, Perlas A, Chan V. Ultrasound Assisted Spinal Anesthesia in Morbidly Obese Patients: A case series. Poster Presentation (A-87) American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April, 2009, Phoenix, AZ
- 6. Choi S, Rampersaud YR, Chan VWS, Persaud O, Brull RT. Post-operative Epidural Analgesia after Minimally Invasive Surgery Lumbar Decompression and Fusion. A Randomized, Double-Blind, Placebo Controlled Study. Poster Presentation (A-25) American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April, 2009, Phoenix, AZ
- 7. Morfey D, Ramlogan R, Perlas A, Chan VW, Brull R. Ultrasound-guided Supraclavicular Block: Success Rates and Patterns of Nerve Sparing. Poster Presentation (A-30) American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April, 2009, Phoenix, AZ (Best of Abstract)
- 8. Kamin S, Koren G, Rodin G, Chan V, Easson A, Li M, Gagliese L. Pain Expectations and Pain Following Breast Cancer Surgery, Canadian Pain Society conference in May, 2009
- 9. Mandeep S, Lupu M, Liang L, Wong TD, Chan WSV. Ultrasonography for Airway Assessment an Observational Study. ASA Annual Meeting, October 2008, Orlando, FL

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- 11. Perlas A, Karkhanis RS, Lo N, Lobo G, Chan VWS. Outcome After 275 Consecutive Ultrasound Guided Supraclavicular Blocks. Poster presentation (A-380) at the 2007 Annual Meeting of the American Society of Anesthesiologists, October 2007, San Francisco, California
- 12. McCartney C, Duggan E, Chan V, Nuica A. A randomized, double-blind controlled study comparing dual endpoint nerve stimulation with ultrasound-guided infraclavicular block for hand surgery Oral Presentation (A1, Best of Meeting). 32<sup>nd</sup> American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April 2007, Vancouver BC
- 13. Lo N, Brull R, Chan V, Sacco R. The Evolution of Ultrasound-Guided Axillary Brachial Plexus Blockade at Toronto Western Hospital. Poster Presentation (A69). 32<sup>nd</sup> American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April 2007, Vancouver BC
- 14. Katz J, Schmid R, O'Leary G, Chan V, Halket E, Dzyuba M. Postoperative pain and morphine are reduced by perioperative multi-modal analgesia. Poster Presentation (26338). Canadian Anesthesiologists' Society Meeting, June 2006, Toronto, Canada
- **15.** Friedman Z, Katznelson T, Devito I, Siddiqui N, Chan V. A video assisted assessment system for residents' skill in epidural anesthesia. Poster Presentation (23240). Canadian Anesthesiologists' Society Meeting, June 2006, Toronto, Canada
- 16. McCartney C, Xu D, Constantinescu C, Chan V. Finding Optimal Position for Ultrasound-Guided Nerve Blocks in the Forearm. Poster Presentation (A9) at the 31<sup>st</sup> American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April 2006, Rancho Mirage CA
- 17. McCartney C, Gibbs A, Abbas S, Chan V.Patients' Knowledge and Concerns Regarding Regional Anesthesia. Poster Presentation (A10) at the 31<sup>st</sup> American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April 2006, Rancho Mirage CA
- 18. Tamir D, Perlas A, McCartney C, Chan V. A Randomized-Controlled, Double-Blind Trial to Determine the Impact of Ultrasound Guidance on the Success Rate of Popliteal Fossa Blocks. Poster Presentation (A58) at the 31st American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April 2006, Rancho Mirage CA
- 19. Perlas A, Chan V, McCartney C, Lau J. Does Ultrasound Guidance Improve the Success of Sciatric Nerve Block at the Popliteal Fossa. Poster Presentation (A58) at the 31<sup>st</sup> American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April 2006, Rancho Mirage CA
- 20. Brull R, Chan V, Shannon P. Intraneural Electrical Stimulation and Ultrasound Detection of Intraneural Injection. Best of Abstract Presentation (A1) at the 31<sup>st</sup> American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April 2006, Rancho Mirage CA
- 21. Awad IT, Chan VW, Perlas A, McCartney C, Abbas S, Xu D, Nova H. Ultrasound Versus Nerve Stimulator Guided Axillary Brachial Plexus Block. Poster Presentation (A48) at the

- 61st Annual Meeting of the Canadian Anesthesiologists' Society Meeting, June 2005, Vancouver, Canada
- 22. Nova HA, Chan VWS, Abbas S, McCartney CJL, Perlas A, Xu D. Ultrasound Examination and Localization of the Sciatic Nerve. Poster Presentation (A47) at the 61<sup>st</sup> Annual Meeting of the Canadian Anesthesiologists' Society Meeting, June 2005, Vancouver, Canada
- 23. Niazi A, Perlas A, Chan VWS, McCartney C, Xu D. Ultrasound Evaluation of Paresthesia and Nerve Stimulation. Poster Presentation (A44) at the 61<sup>st</sup> Annual Meeting of the Canadian Anesthesiologists' Society Meeting, June 2005, Vancouver, Canada
- 24. Li C, McCartney C, Perlas A, Chan V. Ultrasound Evaluation of Needle Tip Position During Lateral Paravascular Supraclavicular Brachial Plexus Block. Poster Presentation (A50) at the 2005 American Society of Regional Anesthesia and Pain Medicine 2005 Annual Spring Meeting, April 2005, Toronto, Canada
- 25. Brull R, McCartney C, Abbas S, Chan V. The Effect of Regional vs. General Anesthesia on Paresthesiae One Year after Ambulatory Hand Surgery. Poster Presentation (A18) at the 2005 American Society of Regional Anesthesia and Pain Medicine 2005 Annual Spring Meeting, April 2005, Toronto, Canada
- 26. Choi M, Perlas A, Chan V, Naik V. Evaluation of Interscalene Block Performance: Establishing Construct Validity. Poster Presentation (A38) at the 2005 American Society of Regional Anesthesia and Pain Medicine 2005 Annual Spring Meeting, April 2005, Toronto, Canada
- 27. Gagliese L, Chan V. A comparison of pain intensity scales in younger and older surgical patients. 11th World Congress on Pain, August, 2005, Sydney, Australia
- 28. Chan V, Valle-Leutri F, Clark AJ, Rossiter-Rooney M. Self-titrated aerosolized liposome-encapsulated fentanyl results in rapid onset and sustained analgesia following ACL knee surgery. Poster presentation (A-77) at the 2004 Annual Meeting of the American Society of Anesthesiologists, October 2004, Las Vegas, Nevada
- 29. Brull R, McCartney CJL, Abbas S, Nova H, Rawson R, Chan VWS, Katz J, Graham B, Anastakis D, von Schroeder H. Regional Anesthesia vs. General Anesthesia for Ambulatory Hand Surgery. Poster Presentation (A2) at the 60<sup>th</sup> Annual Meeting of the Canadian Anesthesiologists' Society Meeting, June 2004, Quebec City, Canada
- 30. Porter J, McCartney C, Chan V. Nerve Stimulator or Ultrasound for Coracoid Infraclavicular Brachial Plexus Block: Influence of needle position on nerve stimulation and spread of injectate. American Society of Regional Anesthesia & Pain Medicine 29th Spring Meeting 2004, Poster Presentation (Poster Number A16)
- 31. Perlas A, Chan VWS, McCartney. Ultrasound assessment of paresthesia and electrical stimulation for nerve localization: A sensitivity study. American Society of Regional Anesthesia & Pain Medicine 29th Spring Meeting 2004, Poster Presentation (Poster Number A33)
- 32. Perlas A, Chan VWS, McCartney. Ultrasound Localization of the Sciatic Nerve. A preliminary study. American Society of Regional Anesthesia & Pain Medicine 29th Spring Meeting 2004 (A1) One of 4 Best of Meeting Abstracts
- 33. Chan VWS, Watt-Watson J, Chung F, McGillion M. Patients' pain management following discharge after day surgery. Can J Anesth 2003;50: A47

- 34. Oldman M, McCartney C, Perlas A, Chan V, Gadsden J, Rawson R, Leung A. A survey of surgeons' attitudes to regional anesthesia. Poster presentation (A12) at the 28<sup>th</sup> American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April 2003, San Diego, California
- 35. Brull RT, von Schroeder H, Anastakis D, Graham B, Katz J, Chan VWS, Abbas SN, Rawson R, McCartney CJ. Regional anesthesia versus general anesthesia for ambulatory hand surgery. Oral presentation (A1) at the 28<sup>th</sup> American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April 2003, San Diego, California
- 36. McCartney CJ, Chan VWS, Sanandaji K, Rawson R, Katz J, Choyce A. Small dose ketamine 0.5 mg/kg produces a peripheral preventive analgesic effect when added to interscalene block for major shoulder surgery. Oral presentation (A4) at the 28<sup>th</sup> American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, April 2003, San Diego, California
- 37. Watt-Watson J, Chung F, Chan V, McGillion M. Patients' pain management k following discharge after day surgery. Pain Research & Management 2003; 8 Supplement B, P-114
- 38. Brull R, McCartney CJL, Rawson R, Abbas S, Chan VWS. The effect of anesthetic technique on paresthesiae after hand surgery. Can J Anesth 2003;50: A42
- 39. Chan V, Clark J, Davis J, Wolf RS, Forsythe A, Manning D, Jayawardene S. A comparison of Cox 189, naproxen and placebo for relief of post-orthopedic surgery pain. 10<sup>th</sup> World Congress on Pain August 2002, San Diego, CA
- 40. Sawyer RJ, Brill S, McCartney C, Chan V, Katz J. An evaluation of intra-articular ketamine analgesia following knee arthroscopy. World Congress on Regional Anaesthesia & Pain Therapy, May 29th -June 1st 2002, Barcelona, Spain
- 41. Perlas A, Chan VWS. Ultrasound Guided Localization of the Brachial Plexus. A Volunteer Study. Poster presentation (A-892) at the 2002 Annual Meeting of the American Society of Anesthesiologists, October 2002, Orlando, Florida
- 42. Perlas A, Peng P, Chan VWS, Barrera-Plaza M, Sanandaji K. A forearm rescue cuff improves tourniquet pain tolerance and prolongs tourniquet time for intravenous regional anesthesia. Poster presentation (A-891) at the 2002 Annual Meeting of the American Society of Anesthesiologists, October 2002, Orlando, Florida
- 43. AJ Prabhu, Song D, VW Chan, Jenkins KL, Wong J, Yogendran S, Chung F. Low dose spinal anaesthesia: how should we test for the ability to walk? Reg Anesth Pain Med 2001;26:A29
- 44. McCartney CJ, Brill S, Chan VW, Sittampallam V, Li M, Iagounova A. A randomised double-blind study of the analgesic effect of neostigmine added to intravenous regional anesthesia. Reg Anesth Pain Med 2001;26:A128
- 45. McCartney CJL, Murphy DB, Vucemilo I, Chan VWS. Intravenous ropivacaine test dose—a volunteer study. Reg Anesth Pain Med 2000;25:A7
- 46. McCartney CJL, Bhardwaj A, Middleton W, Peng P, Kaszas Z, Chan VWS. Patient controlled epidural analgesia- comparison between high concentration low volume and low concentration high volume techniques. Poster presentation at International Symposium on Regional Anesthesia & Pain Medicine 2000, Quebec, Canada
- 47. Poate E, Regan J, Middleton W, Peng P, Chan V. Analgesic effects of low dose ropivacaine for interscalene brachial plexus block for outpatient shoulder surgery. A dose response study. Poster discussion presentation at International Symposium on Regional Anesthesia & Pain Medicine 2000, Quebec, Canada

- 48. Coleman M, Peng P, Regan J, Hendler A, Chan V. Quantitative comparison of tourniquet leakage between forearm and conventional (upper arm) intravenous regional anesthesia. Can J Anaesth 1999; 46:A28–B
- 49. Murphy DB, El-Beheiry H, Foss J, Chan V. Pharmacokinetic of epidural administered methylnaltrexone a novel peripheral opioid anatagonist. Anesthesiology 1999; 91:A349
- 50. Chan VWS, Nazarnia S, Kaszas Z, Perlas A. The Impact of Epidural Saline Administration on the Resolution of Epidural Anesthesia. Reg Anesth and Pain Med 1998; 23:S73
- 51. Chan VWS, Chinyanga H, Peng P, Kaszas Z. Minimum Effective Anesthetic Concentration of Hyperbaric Bupivacaine for Spinal Anesthesia. Reg Anesth and Pain Med 1998; 23:S9
- 52. Vaghadia H, Chan V, Ganapathy S, Lui A, McKenna J, Zimmer K. Ropivacaine 7.5 mg/mL versus bupivacaine 5 mg/mL for brachial plexus block: a multicentre trial. Can J Anaesth 1998; 45:A37–A
- 53. Weisbrod MJ, Chan VWS, Kaszas Z, Dragomir C. Intravenous regional anaesthesia with ropivacaine. Can J Anaesth 1998; 45:A14–A
- 54. Peng P, Claxton AR, Chung F, Chan V, Miniaci A, Krishnathas A. Femoral nerve block improves postoperative pain control in patients undergoing anterior cruciate ligament repair. Anesthesiology 1998;89:A1122
- 55. Nazarnia S, Chan VWS, Clune L, Peng P, Al–Kaisy A, Perlas A. A Comparison of Cost Effectiveness of Regional Anesthesia versus General Anesthesia For Outpatient Hand Surgery. Reg Anesth 22:S20, 1997
- 56. Peng PWH, Chan VWS. Determination of minimum effective anesthetic concentration (MEAC) of hyperbaric lidocaine for spinal anesthesia. Reg Anesth 22:S121, 1997
- 57. Chan VWS, Nazarnia S, Dombek T. The Impact of Epidural Saline Administration on the Resolution of Epidural Anesthesia— A Dose Response Study. Society of Ambulatory Anesthesia 13th Annual Meeting, May 1997
- 58. Al-Kaisy AA, McGuire G, Chan V, Miniaci A, Bruin G, Peng P, Perlas A. Effective Interscalene Block Using Low Dose Bupivacaine Shortens Discharge Time Following Outpatient Shoulder Arthroscopy. Society of Ambulatory Anesthesia 13th Annual Meeting, May 1997
- 59. Al-Kaisy AA, Chan V, Peng P, Perlas A, Miniaci A. Postoperative analgesic effect of low dose bupivacaine for interscalene brachial plexus block for shoulder surgery, a dose finding study. Can J Anaesth 44: A60–A, 1997
- 60. Peng P, Chan V. Dose-dependency of minimum effective anaesthetic concentration (MEAC) of hyperbaric lidocaine for spinal anaesthesia. Can J Anaesth 44: A69–A, 1997
- 61. Peng P, Chung F, Claxton AR, Chan V, Krishnathas A. Reducing pain after arthroscopic anterior cruciate ligament repair—comparison of ketorolac vs femoral nerve block. Can J Anaesth 44: A69–B, 1997
- 62. Al-Kaisy AA, McGuire G, Chan V, Miniaci A, Bruin G, Peng P, Perlas A. Effective Interscalene Block Using Low Dose Bupivacaine Shortens Discharge Time Following Outpatient Shoulder Arthroscopy. PGA Annual Meeting, December 1996
- 63. Chan VWS, Infosino A, Olney R: Accurate Electrolocalization of the Brachial Plexus for Interscalene Block Using Electromyographic (EMG) Technology. Reg Anesth 20:S15, 1995
- 64. Sandler A, Finucane B, McKenna J, Reid D, Milner A, Friedlander M, Muzyka D, O'Callaghan-Enright S, Chan V, Nierenberg H: A Pharmacokinetic Comparison Between

- Ropivacaine 0.5%, 0.75%, 1.0% and Bupivacaine 0.5% in Epidural Anaesthesia: A Double Blind Multi Centre Study in Women Undergoing Hysterectomy. Can J Anaesth 42:A43, 1995
- 65. Chan VWS, Garcia J, Drasner K: A Comparative Study of Hyperbaric Spinal Lidocaine 0.5% Versus 5% for Urologic Surgery. Anesthesiology 83:A777, 1995
- 66. Chan VWS, Chung F, McQuestion M, Gomez M, Cruise C, Evans D, Shumka D: Does Patient Controlled Analgesia (PCA) Therapy Quicken Recovery Following Spinal Surgery? Anesth Analg 78: S53, 1994
- 67. Finucane BT, Sandler AN, McKenna J, Milner A, Friedlander M, Reid D, Muzyka D, Chan V, O'Callaghan-Enright S: A Double-blind Comparison of Clinical Effects of Ropivacaine 0.5%, 0.75%, 1.0%, and Bupivacaine 0.5%, Injected Epidurally in Patients Undergoing Hysterectomy. Reg Anesth 19: S11, 1994
- 68. Chan VWS, Chung F, Gomez M, Baylon GJ: Anesthetic Effects of Single Bolus Versus Incremental Titration of Hyperbaric Spinal Lidocaine Through Microcatheter. Anesth Analg 76:S42, 1993
- 69. Chung FF, Chan VWS, Baylon GJ: Propofol Infusion Induction in the Elderly-Haemodynamic Profile. Can J Anaesth 40:A38, 1993
- 70. Sakura S, Chan V, Ciriales R, Drasner K: Intrathecal Infusion of Lidocaine in the Rat Results in Dose-Dependent, but Not Concentration-Dependent, Sacral Root Injury. Anesthesiology 79:A851, 1993
- 71. Sakura S, Chan V, Ciriales R, Drasner K: Do Local Anesthetic Solutions Currently Used For Spinal Anesthesia Differ in Their Neurotoxic Potential? Anesthesiology 79:A880, 1993
- 72. Chan VWS, Chung F, McQuestion M, Gomez M, Cruise C, Evans D, Shumka D: Patient Controlled Analgesia (PCA) Therapy: Cost Saving in Nursing Time and Early Hospital Discharge? Can J Anaesth 39:A73, 1992
- 73. Yogendran S, McGuire G, Gomez M, Chan V, Chung F: Postoperative Hypoxemia In Ambulatory Surgery. Can J Anaesth 39:A134, 1992
- 74. Chan VWS, Mati N, Seyone C, Evans D, Chung F: Continuous Spinal Anaesthesia: Effects Of Titrated Lidocaine Boluses. Can J Anaesth 38:A8, 1991
- 75. Chan VWS, Chung F, Mati N, Evans D, Cruise C, Shumka D, Seyone C: Patient-Controlled Analgesia (PCA): Use Patterns In Abdominal And Thoracic Surgery. Can J Anaesth 38:A115, 1991
- 76. Chung F, Ong D, Seyone C, Mati N, Powell P, Chan V: A New Postanesthetic Discharge Scoring System For Ambulatory Surgery. Anesth Analg 72:S42, 1991
- 77. Chung F, Seyone C, Mati N, Ong D, Powell P, Chan V: Validation Of An Objective Ambulatory Surgery Discharge Scoring System. Can J Anaesth 38:A59, 1991
- 78. Chan VWS, Evans D, Chung F, Shumka D, Patel P, Seyone C. Economics and Use Patterns of Patient-Controlled Analgesia (PCA): A Canadian Experience, Scientific Exhibit., Canadian Anaesthetists' Society Annual Meeting 1990, Vancouver, Canada
- 79. Chan VWS, Chung F, Cruise C, Johnston N, Evans D, Shumka D. Initiation and organization of a patient-controlled analgesia (PCA) service: a practical guide, Information Booklet, Canadian Anaesthetists' Society Annual Meeting 1990, Vancouver, Canada
- 80. Chan VWS, Chung F, Cheng DCH, Seyone C, Chung A, Kirby TJ: Analgesic Effect of Continuous Intercostal Nerve Block Following Thoracotomy. Anesth Analg 68:S50, 1989

- 81. Chan VWS, Ferrante FM, Arthur GR: Analgesic Effect of Intrapleural Bupivacaine Following Thoracotomy. Can J Anaesth 36:S154, 1989
- 82. Chan VWS, GR Arthur and FM Ferrant. Intrapleural Bupivacaine Administration For Pain Relief Following Thoracotomy. International Symposium on Regional Anesthesia 1988, Williamsburg, Virginia
- 83. Rocco AG, Chan V, Iacobo C. An Algorithm for the Treatment of Pain in Adanced Cancer. Joint Meeting of the Canadian and American Pain Societies 1988, Toronto, Canada
- 84. Chan VWS, Chung F, Cheng DCH, Kirby TJ, Chung A, Sandler A: Continuous Intercostal Nerve Block for Pain Relief Following Thoracotomy- A New Approach. Can J Anaesth 35:S113, 1988
- 85. Chan VWS, H Vosu, PK Morley-Forster. Shivering Following Epidural Anaesthesia For Caesarean Section. Society For Obstetric Anesthesia & Perinatology Annual Meeting 1987, Halifax, Nova Scotia

# <u>VISITING PROFESSORSHIPS, INVITED LECTURES, SYMPOSIA AND WORKSHOPS</u>

#### **VISITING PROFESSORSHIPS**

- 1. 2012 Sep Department of Anesthesia, Xijing Hospital, Xi'an China Lecture "Recent Advance and Future Trend in Ultrasound Guided Regional Anesthesia"
- 2. 2012 Sep Department of Anesthesia, 2<sup>nd</sup> Affiliated Hospital of Wenzhou Medicine College, Wenzhou, China
  Lecture "Recent Advance and Future Trend in Ultrasound Guided Regional Anesthesia"
- 3. 2012 Sep Department of Anesthesia, Peking University No. 3 Hospital, Beijing, China Lecture "Recent Advance and Future Trend in Ultrasound Guided Regional Anesthesia"
- 4. 2012 Sep Department of Anesthesia, Chaoyang Hospital, Beijing, China Lecture "Recent Advance and Future Trend in Ultrasound Guided Regional Anesthesia"
- 5. 2012 Feb Department of Anesthesia, University of California San Francisco, San Francisco CA

  Lectures "Perioperative Use of Ultrasound in Anesthesia" & "Sonoanatomy Relevant to Pain Blocks"
- 6. 2012 Jan Department of Anesthesia, Hospital for Special Surgery, New York NY Lecture "Recent Advances in Ultrasound Imaging for Regional Anesthesia"
- 7. 2010 Apr Department of Anesthesia, campus Gasthuisberg, UZ Leuven, Leuven, Belgium Lecture "Recent Advances in Ultrasound Guided Regional Anesthesia"
- 8. 2010 Apr Department of Anesthesiology and Pain Therapy, Maastricht University Medical Center, Maastricht, Netherlands
  Lectures "Does Ultrasound Make Regional Anesthesia Safer?" & "Difficult Spine Cases"

- 9. 2010 Feb Stony Brook University Health Sciences Center School of Medicine AAPM/Pfizer Visiting Professorships in Pain Medicine Award Lecture "Does Ultrasound Make Regional Anesthesia Safer?"
- 10. 2010 Feb Beth Israel Deaconess Medical Center, Department of Anesthesia, Critical Care and Pain Medicine

  Lecture "Does Ultrasound Make Regional Anesthesia Safer?"
- 11. 2009 May Gary Johnson Resident Research Day, Department of Anesthesiology University of Ottawa, Ottawa, Ontario
  Lecture "Ultrasound Applications in Anesthesia"
- 12. 2009 Apr Department of Anesthesia, Sir Charles Gairdner Hospital, Perth, West Australia Lectures "Ultrasound Applications in Anesthesia Practice" & "Topics and Controversies in Regional Anesthesia"
- 13. 2009 Mar Department of Anaesthetics, Royal Prince Alfred Hospital, Sydney, Australia Lectures "Ultrasound vs. Nerve Stimulation for Regional Anesthesia" & "Clinical Pearls for Ultrasound Guided Nerve Blocks"
- 14. 2009 Feb Department of Anesthesia & Critical Care, Massachusetts General Hospital, Harvard Medical School, Boston MA
  Lecture "Ultrasound Applications in Anesthesia"
- 15. 2009 Feb Department of Anesthesiology, Queen's University, Kingston, Ontario Lecture "*Ultrasound Guided Regional Anesthesia*"
- 16. 2008 Dec Department of Anesthesia, University of Iowa, Iowa City, IA
  Lectures "Ultrasound Applications in Anesthesia" & "Essentials of Regional
  Anesthesia"
- 17. 2008 July Department of Anesthesia, Wayne State University, Detroit, MI Lectures "Newer Ultrasound Applications for Anesthesia Practice" and "Ultrasound Guided Regional Anesthesia"
- 18. 2008 May Department of Anesthesiology, University of Buffalo, Buffalo, NY Lecture "Newer Ultrasound Applications for Anesthesia Practice"
- 19. 2008 Feb Department of Anesthesiology, St. Vincent's Hospital, Melbourne, Australia Lecture "Newer Ultrasound Applications in Anesthesia"
- 20. 2008 Jan Department of Anesthesiology, Penn State Hershey Medical Center, Hershey, PA Lecture "Ultrasound Guided Regional Anesthesia- Is It Here to Stay?"
- 21. 2007 Oct Department of Anesthesiology, SUNY Downstate Medical Center, Brooklyn, NY Lectures "Ultrasound Guided Regional Anesthesia" & "Ultrasound For Anesthesia Practice"
- 22. 2007 Sep Department of Anesthesia, Rikshospitalet, Oslo, Norway Lecture "Is Ultrasound Guided Neuraxial Block a Useful Technique?"
- 23. 2007 May Vanderbilt University Medical Center, Department of Anesthesiology, Nashville, TN

  Lecture "Newer Applications of Ultrasound in Anesthesia- An Update"
- 24. 2007 Apr University of Maryland, Department of Anesthesiology, Baltimore, Maryland Lectures "Ultrasound Guided Vascular Access" & "Ultrasound Guided Regional Anesthesia"
- 25. 2006 Sep Oregon Health & Science University, Department of Anesthesiology &

Peri-Operative Medicine, Portland, Oregon Lecture "Purpose Driven Regional Anesthesia- The Role of Ultrasound Imaging"

Problem Based Learning "Challenging Cases in Regional Anesthesia"

- 26. 2006 Aug Columbia University Medical Center, Department of Anesthesiology, New York Presbyterian Hospital Medical Center, New York Lecture "Ultrasound Imaging for Regional Anesthesia"
- 27. 2006 Aug Virginia Mason Medical Center, Department of Anesthesiology, Seattle, WA Lecture "Ultrasound Imaging for Regional Anesthesia"
- 28. 2006 July Cleveland Clinic, Division of Anesthesiology, Critical Care Medicine and Comprehensive Pain Management, Cleveland
  Lectures "Ultrasound Imaging for Regional Anesthesia" & "How Ultrasound Guided Techniques Can Improve Patient Outcome"
- 29. 2006 June Brigham and Women's Hospital, Department of Anesthesia, Boston, MA
  Lecture "Purpose Driven Regional Anesthesia- The Role of Ultrasound Imaging"
- 30. 2006 May University of Manitoba, Department of Anesthesia, Winnipeg, Manitoba Lectures "Ultrasound Guided Regional Blocks", "How Ultrasound Guided Vascular Access and Regional Anesthesia Can Improve Patient Outcome"
- 31. 2006 May Vanderbilt University Medical Center, Department of Anesthesiology, Nashville, TN

  Lecture "Purpose Driven Regional Anesthesia The Role of Ultrasound Imaging"
- 32. 2006 May Rush University Medical Center, Department of Anesthesiology, Chicago, Il Lecture "Ultrasound Guided Nerve Blocks"
- 33. 2006 Jan Hospital Authority, Hong Kong, China
  Lectures "The Basics of Ultrasound Imaging", "Ultrasound Guided Brachial
  Plexus Blocks", "Ultrasound Guided Lumbosacral Blocks", "Can ultrasound
  Guidance Improve Block Outcome?"
  Workshop demonstration at Queen Mary Hospital, Queen Elizabeth Hospital,
  United Christian Hospital, Kwong Wah Hospital, Caritas Medical Centre, Tuen
  Mun Hospital, Alice Ho Miu Ling Nethersole Hospital, Prince of Wales Hospital,
  North District Hospital
- 34. 2006 Jan Department of Anesthesiology, University of Alabama, Birmingham, AL Lectures "What you see is what you get: Ultrasound Imaging for Regional Anesthesia", "Does Ultrasound Guided Nerve Block Improve Patient Outcome?"
- 35. 2005 Dec Department of Anesthesia, Queen's University, Ontario, Canada
  Lecture "What you see is what you get: Ultrasound Imaging for Regional
  Anesthesia"
  Workshop "Challenging cases in Regional Anesthesia"
- 36. 2005 Jun Department of Anesthesiology, Vanderbilt University Medical Center, Nashville, TN

  Lectures "Ultrasound Imaging for Peripheral Nerve Blocks" and "Use of Ultrasound Guided Nerve Blocks"

  Workshop "Ultrasound Guided Nerve Blocks"
- 37. 2004 Dec Ralph M. Waters Visiting Professor, Department of Anesthesiology, University of

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Wisconsin, Madison, Wisconsin

Netherlands

Lectures "Ultrasound Imaging as a Teaching Tool" and "Is Ultrasound Guided Nerve Block Practical?"

- 38. 2004 May Department of Anesthesia, Wake Forest University Health Sciences Center, Winston-Salem, North Carolina
  Lectures "Ultrasound Imaging As A Teaching Tool" and "Is Ultrasound Guided"
- Nerve Block Practical?"
  39. 2004 Apr Department of Anesthesia, Universitair Medisch Centrum, St Radboud, Nijmegen,

Lectures "Epidural Analgesia- Does It Improve Outcome?", "Ultrasound Imaging for Peripheral Nerve Blocks"

- 40. 2004 Jan Department of Anesthesia, University of Western Ontario Lecture "Ultrasound and Regional Anesthesia"
- 41. 2003 Sep Department of Anesthesiology, Mayo Clinic, Rochester MN

  Lectures "Ultrasound Imaging for Peripheral Nerve Blocks", "Regional Anesthesia Case Presentations"
- 42. 2001 Apr Department of Anesthesia, University of Iowa, Iowa City, IA
  Lectures "What is New in Regional Anesthesia for Pain Management?" &
  "Treatment of Postdural Puncture Headache"
- 43. 2001 Jan Department of Anesthesia, University of Manitoba, Winnipeg,
  Canada
  Lectures "What is New in Regional Anesthesia for Pain Management" &
  "Regional Analgesia for Thoracic Surgery"
  Workshop "Brachial Plexus Blocks"
- 44. 2000 Mar Department of Anesthesia, McMaster University, Hamilton,
  Canada
  Lecture "Promotion of Regional Anesthesia in a Busy Clinical Practice"
  Workshop "Brachial Plexus Blocks"
- 45. 1999 Oct Leonard Jenkins Visiting Professor, Department of Anesthesia, University of British Columbia, Vancouver, Canada
  Lectures "Recent Advances in Regional Anesthesia" & "Epidural Analgesia for Postoperative Pain"
  Workshop "Brachial Plexus Blocks"
- 46. 1999 Mar Department of Anesthesia, University of Calgary
  Lectures "Recent Advances in Regional Anesthesia" & "Regional Anesthesia in a
  Teaching Hospital— Challenges and Solutions"
- 47. 1995 Sept First Affiliated Hospital of the West China University of Medical Sciences, Sichuan, China
  Lecture "Understanding the Management of Pain"
- 48. 1995 Sept Peoples' Hospital of Mingshan Prefecture, Sichuan, China Lecture "Recent Advances in Regional Anesthesia and Pain Management"

#### **International Meetings**

2012 Oct	Acute & Chronic Pain Symposium, Gurgaon India
	Lecture "Ultrasound Guided Lower Limb Blocks," "Ultrasound Guided Central
	Neuraxial Block"
2012 Oct	7 <sup>th</sup> Advanced Regional Anaesthesia and Ultrasound Workshop, Hyderabad, India
	Lecture "Ultrasound for Regional Anesthesia - An Update," "Ultrasound Guided
	Sciatic Nerve Block"
	Moderator "Pro Con Debate- Dual Guidance with Peripheral Nerve Stimulation
	and Ultrasound"
	Workshop "Lower Limb Blocks"
2012 Oct	Department of Anaesthesia, King Edward Memorial Hospital, Mumbai, India
	Lecture "Basic Principles of Ultrasound for Regional Anesthesia"
	Live Demonstration in the Operating Room
2012 Oct	Ultrasound Guided Nerve Block Workshop, Dubai
	Lecture "Current Concept and Future Trends of Ultrasound Guided Regional
	Anesthesia"
	Workshop "Interscalene & Supraclavicular" "Axial Block"
2012 Oct	63 <sup>rd</sup> American Society of Anesthesiologists Annual Meeting, Washington DC
	Lecture "Nerve Injury Following Regional Anesthesia: What Has Ultrasound Taught Us?"
	Workshop "Peripheral Nerve Blocks: Ultrasound, Simulation and Stimulation"
2012 Oct	Timisoara Ultrasound Guided Regional Anesthesia Workshop, Timisoara,
_01_ 000	Romania
	Lectures "Brachial Plexus Above the Clavicle," "Brachial Plexus Below the
	Clavicle," "Peripheral Upper Limb Blocks," "Femoral /Saphenous Nerve
	Block," "Sciatic Nerve (Popliteal) & Ankle Blocks," "Neuraxial Block,"
	"Transversus Abdominis Block (TAP)/Illioinguinal/Illiohypogastric Nerve Block"
	Workshop "Pig Phantom"
2012 Oct	23 <sup>rd</sup> Meeting of European Society for Computing and Technology in Anesthesia
	and Intensive Care, Timisoara, Romania
	Lecture "Current Concepts and Future Trends for Ultrasound Guided Regional
	Anesthesia"
2012 Sep	Guangdong Provincial Hospital, Guangzhou, China
	Lecture "Recent Advance and Future Trend in Ultrasound Guided Regional
	Anesthesia" and "How to publish the papers in the international Journal"
2012 Sep	Zhongshan University 1st Affiliated Hospital, Guangzhou, China
	Live Demonstration Ultrasound Guided Regional Anesthesia
2012 June	9 <sup>th</sup> Annual International Symposium of Ultrasound for Regional Anesthesia and
	Pain Medicine, Toronto, Canada
	Lecture "What is the Optimal Local Anesthetic Spread Pattern?"
2012 May	86 <sup>th</sup> International Anesthesia Research Society Clinical & Scientific Congress,
	Boston MA
	Workshops "Advanced Ultrasound Guided Nerve Block" and "Peripheral Nerve
	Blocks: Ultrasound, Simulation and Stimulation"

2012 Apr	4 <sup>th</sup> Annual Ultrasound Guided Regional Anesthesia Workshop Upper and Lower Extremity Peripheral Nerve Blocks, Little Rock, AR
	Lectures "Basics of Ultrasound Guided Regional Anesthesia" & "Axillary
	Brachial Plexus Block'
	Live Demonstrations "Ultrasound Guided Brachial Plexus and Lower Limb
	Blocks"
	Workshop "Ultrasound Guided Brachial Plexus Block"
2012 Mar	15th WSFA World Congress of Anesthesiologists, Buenos Aires, Argentina
	Lectures "Ultrasound for Regional Anesthesia: Where are We Today?" &
	"Ultrasound Guided Perineural Catheter for Pain Management"
	Workshop "Regional Anesthesia in Adults"
2012 Mar	37 <sup>th</sup> American Society of Regional Anesthesia and Pain Medicine Annual Spring
2012 11141	Meeting, San Diego CA
	Workshops "Infraclavicular and Axillary Brachial Plexus Blocks" & "Intensive
	Ultrasound Comprehensive Workshop"
2012 Mar	4th USRA Symposium of Regional Anaesthesia - Ultrasound guided nerve blocks
	-seminar and workshop, University of Leipzig, Leipzig, Germany
	Lecture "Sciatic nerve blocks: popliteal, anterior and subgluteal"
	Workshop "Sonoanatomy for peripheral nerve blocks"
2012 Feb	Annual Meeting of the Tennessee Society of Anesthesiologists, Nashville, TN
2012100	Lecture "Perioperative Use of Ultrasound in Anesthesia"
2011 Dec	NYSORA 10 <sup>th</sup> Annual Regional Anesthesia and Acute Pain Management
2011 200	Symposium
	Lectures "Ultrasound and Continuous Nerve Blocks: Techniques and Stimulating
	versus Non-Stimulating Catheters" & "Equipment for Peripheral Nerve Block:
	What is New That You Should Know About"
2011 Dec	Ultrasound Guided Regional Anesthesia Workshop, 6th Ateliers d'Echographie en
_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ALR, Clermont-Ferrand, France
	Lecture "Ultrasound Guided Regional Anesthesia: Complications & Prevention"
	Workshop "Infraclavicular Block"
2011 Nov	58º Congresso Brasileiro de Anestesiologia, Fortaleza, CE, Brazil
	Lectures "Understanding Ultrasound Images of Peripheral Nerve Blocks" &
	"Local Anesthetic Toxicity in Peripheral Nerve Blocks"
	Workshop "Peripheral and Neuraxial Blockade"
2011 Nov	Continuing Medical Education Day 2011 and Current Concepts Symposium, The
	Royal College of Anaesthetists, London, UK
	Lectures "Peripheral Nerve Blockade" & "Regional Anaesthesia and
	Anticoagulated Patients: ASRA Guidelines"
2011 Oct	62 <sup>nd</sup> American Society of Anesthesiologists Annual Meeting, Chicago, IL
, 0 • •	Lecture "Nerve Injury Following Regional Anesthesia: What Has Ultrasound
	Taught Us?"
	Workshop "Peripheral Nerve Blocks: Ultrasound, Simulation and Stimulation"

2011 Aug Ultrasound Guided Peripheral Nerve Block, International Training Course, Department of Anesthesiology, Faculty of Medicine Siriraj Hospital, Bangkok, Thailand Lectures "Pearls and Pitfalls in Ultrasound Guided Regional Anesthesia," & "Principles of ultrasonography: physics, scanning techniques, knobology" Live Demonstration "Interscalene, Supraclavicular, Infraclavicular, Axillary Brachial Plexus Sonoanatomy" Panel Discussion "Diagnosis and Prognosis of Nerve Damage Associated with Peripheral Nerve Block" Workshop "Upper Extremity: Interscalene, Supraclavicular, Scanning and Needling Technique (Soft Cadaver)" The Royal College of Anesthesiologists of Thailand, Annual Meeting, Bangkok, 2001 Aug Thailand Lecture "Preoperative Ultrasound Application for Airway, Stomach and Cardiac Assessment" 2011 Jul International Forum on Visual Technology for Anesthesia/Pain/Critical care/ Emergency Medicine 2011, Cheng Du, China Lectures "Ultrasound Guided Regional Anesthesia- Current Concept & Future Trend" & "New Applications of Ultrasound in Anesthesia and Future Trends in Regional Anesthesia" Workshop "Vascular, Tracheal and Stomach Ultrasound" 2011 Jul Beijing Society of Anesthesiology Annual Meeting, Beijing, China Lecture "Ultrasound Guided Regional Anesthesia - Current Concepts and Future Trend" 85th International Anesthesia Research Society Clinical & Scientific Congress, 2011 May Vancouver, Canada Lecture "Ultrasound Guided Perineural Catheter" Workshops "Advanced Ultrasound Guided Nerve Block" and "Peripheral Nerve Blocks: Ultrasound, Simulation and Stimulation" 2011 May Combined Scientific Meeting of the Australian and New Zealand College of Anaesthetists (ANZCA), the Faculty of Pain Medicine (FPM) and the Hong Kong College of Anaesthesiologists (HKCA), Hong Kong, China Lectures "Does Regional Anaesthesia Improve Outcomes?", "Breaking the Sound Barrier: Update on Ultrasound in Clinical Practice", "New Uses of Ultrasound in (Non-Regional) Anaesthesia Practice", "Training, Competency and Certification in Ultrasound-Guided Regional Anaesthesia" & "Intraneural *Injection: Is It Ever Indicated?*" Poster Session Facilitator Moderator, Live Pearls: Realtime Ultrasound-Guided Regional Anaesthesia Demonstration 3<sup>rd</sup> Annual Ultrasound Guided Regional Anesthesia Workshop Upper and Lower 2011 Apr Extremity Peripheral Nerve Blocks, Little Rock, AR Lectures "Basics of Ultrasound Guided Regional Anesthesia" & "Axillary Brachial Plexus Block"

Live Demonstrations "Ultrasound Guided Brachial Plexus and Lower Limb Blocks" Workshop "Ultrasound Guided Brachial Plexus" 8<sup>th</sup> Annual International Symposium of Ultrasound for Regional Anesthesia and 2011 Apr Pain Medicine, Bern, Switzerland Lecture "Recent and Relevant Literature in Ultrasound Guided Regional *Anaesthesia*" & "Ultrasound Guided Catheter Techniques – Tips and Tricks" Workshops "Ultrasound Guided Upper and Lower Limb Blocks" Cadaver Workshop Innsbruck, Austria 2011 Apr Workshop Instructor 1<sup>st</sup> African Society for Regional Anesthesia meeting, Cairo, Egypt 2011 Apr Lectures "Ultrasound Guided Brachial Plexus Block" & "Ultrasound Guided Lower Limb Blocks" Workshop "Ultrasound Guided Upper and Lower Limb Blocks" 3<sup>rd</sup> International Symposium on Spine and Paravertebral Sonography for 2011 Mar Anaesthesia and Pain Medicine Lectures "Ultrasound Guided Regional Anesthesia – Where Are We Today?" & "New Applications of Ultrasound in Anaesthesia and Future Trends in Regional Anaesthesia" Workshops "Brachial Plexus Block above the Clavicle - Interscalene and Supraclavicular" & "Lumbar Paravertebral Imaging" 2011 Mar 3rd USRA Symposium of Regional *Anaesthesia* - Ultrasound guided nerve blocks - seminar and workshops, University of Potsdam, Potsdam, Germany Lectures "Where are the pitfalls? Errors and artifacts", "What will the future bring— in Europe and North America?" Workshops "Sonoanatomy of Peripheral Nerves and Surrounding Tissues", "Sonoanatomy of the Brachial Plexus and Peripheral Nerves", "Sonoanatomy for Lower Extremity Nerve Blocks" & "Sonoanatomy for Central Neuraxial and Anterior Abdominal Wall Blocks" 2010 Dec NYSORA 9<sup>th</sup> Annual Regional Anesthesia and Acute Pain Management Symposium Lecture "Ultrasound Guided Regional Anesthesia Artifacts, Pitfalls and Clinical Pearls" Workshop "Single-Injection and Continuous Sciatic and Popliteal Blocks" 64<sup>nd</sup> Postgraduate Assembly in Anesthesiology, The New York State Society of 2010 Dec Anesthesiologists, Inc., New York, NY Lecture "Update on Ultrasound Guided Regional Anesthesia" Workshop "Ultrasound, Simulation and Stimulation for Peripheral Nerve Blocks' Annual Pain Medicine Meeting and Workshops, American Society of Regional 2010 Nov Anesthesia and Pain Medicine, Phoenix, AZ Lecture "Ultrasound for Pain Procedures – Present and Future", "Principles of Ultrasonography: Physics, Scanning Techniques, Knobology" 61th American Society of Anesthesiologists Annual Meeting, San Diego, CA 2010 Oct

	Lecture "Is Ultrasound the Most Effective and Safest Technique for Peripheral Nerve Block?"
	Workshop "Peripheral Nerve Blocks: Ultrasound, Simulation and Stimulation"
2010 Sep	VIII Symposium on Regional Anesthesia and Pain Medicine, Santiago, Chile
	Lectures "Ultrasound Guided Catheter Techniques" "Ultrasound Guided Central
	Neuraxial Blocks" & "Outcome of Ultrasound Guided Regional Anesthesia"
	Workshops "Sonoanatomy of the Upper Limb" & "Sonoanatomy of the Lower
	Limb"
2010 Aug	Ultrasound for Pain Medicine Workshop, Satellite Symposium of the 13th World
	Congress on Pain, Montreal, Canada
	Lecture "Basic Techniques for Ultrasound Guided Injection"
	Workshop "Lateral Femoral Cutaneous Nerve, Ilioinguinal and Iliohypogastric
	Nerves"
2010 Jun	Excellence in Regional Anesthesia Workshop, American Society of Regional
	Anesthesia, Chicago, MI
	Lecture "Ultrasound Guided Brachial Plexus Blocks Above the Clavicle"
	Workshops "Brachial Plexus Blocks Above the Clavicle" "Brachial Plexus Blocks
	Below the Clavicle" "Blocks of Abdomen and Spine" "Lower Extremity Blocks"
2010 Jun	7 <sup>th</sup> Annual International Symposium of Ultrasound for Regional Anesthesia and
	Pain Medicine, Toronto, Ontario, Canada
	Lecture "Ultrasound Guided Perineural Catheter Techniques"
2010 Mar	84 <sup>th</sup> International Anesthesia Research Society Clinical & Scientific Congress,
	Honolulu, Hawaii
	Lecture "Ultrasound Guided Regional Anesthesia"
	Workshops "Advanced Ultrasound Guided Nerve Block" and "Peripheral Nerve
	Blocks: Ultrasound, Simulation and Stimulation"
2010 Mar	2 <sup>nd</sup> International Symposium on Spine and Paravertebral Sonography for
	Anaesthesia and Pain Medicine
	Lectures "Ultrasound Guided Regional Anesthesia – Where Are We Today?"
	Workshops "Lower Extremity Blocks with the Patient in the Prone Position –
2010 1	Sciatic Nerve Blocks" & "Lumbar Paravertebral Imaging"
2010 Jan	Aspen Anesthesia 2010, Snowmass, CO Lectures, "Ultrasound Guided Lumbosacral Plexus and Neuraxial Blocks"
	"Ultrasound Guided Lower Limb Blocks" "Ultrasound Guided Upper Limb
	Blocks" & "Can Ultrasound Imaging Change Clinical Outcome?"
2009 Nov	Annual Pain Medicine Meeting and Workshops, American Society of Regional
	Anesthesia and Pain Medicine, San Antonio, TX
	Lectures "Basic Ultrasound Techniques" & "Principles of Ultrasonography:
	Physics, Scanning Techniques, Knobology"
2009 Oct	60th American Society of Anesthesiologists Annual Meeting, New Orleans, LA
	Moderator "Ultrasound-Guided Regional Anesthesia: Future Practice or Flash in
	the Pan?" Moderator "Why Do A Regional Anesthetic When a Local Will Do?"
	Lecture "Ultrasound Can Prevent Nerve Injury"
	Workshop "Peripheral Nerve Blocks: Ultrasound, Simulation and Stimulation,"

2009 Sep	Midwest Anesthesiology Conference Presented by the Illinois Society of Anesthesiologists, Chicago, Illinois
	Lecture "Does Ultrasound Make Regional Anesthesia Safer?"
	Workshop "Ultrasound for Upper and Lower Limbs"
2009 Sep	6 <sup>th</sup> Annual International Symposium of Ultrasound and Regional Anesthesia,
	Schwetzingen, Germany
	Lecture "Catheters and Peripheral Nerve Blocks" & "Nerve Stimulation or
	Ultrasound Visualization"
2009 Sep	28th European Society of Regional Anesthesia Annual Congress, Salzburg, Austria
	Workshops "Basic Ultrasound Workshop" and "Experienced Ultrasound
	Workshop"
2009 Jul	Excellence in Regional Anesthesia Workshop, American Society of Regional
	Anesthesia, Seattle, WA
2009 Apr 2009 Apr	34th American Society of Regional Anesthesia and Pain Medicine Annual Spring
	Meeting, April 2009, Phoenix AZ
	Lecture "Review of ASRA-ESRA Guidelines for Curricula"  Workshops "Ultragound Upper Entropity" & "Intensive Ultragound
	Workshops "Ultrasound Upper Extremity" & "Intensive Ultrasound Comprehensive Workshop"
	1st International Symposium on Spine and Paravertebral Sonography for
	Anaesthesia and Pain Medicine
	Lectures "Sonoanatomy of the Upper Limb," "Ultrasound Guided Perineural Catheter Placement- Challenges and Pearls" & "Basic Principles of Spine and
	Paravertebral Imaging"
	Workshops "Sonoanatomy Upper Limb: Midhumeral, Radial, Ulnar, Median and
	Musculocutaneous Nerves" & "Lumbar Paravertebral Imaging"
2009 Apr	Australian Regional Anaesthesia Cadaveric Ultrasound Seminars, Perth, West
	Australia
	Lecture "Newer Ultrasound Applications for Anesthesia Practice" Debate "All Patients Should Get Regional Anesthesia?" & "Ultrasound vs. Nerve
	Stimulation for Regional Anesthesia" & Ottrasouna vs. Nerve
	Workshops "Brachial Plexus Below the Clavicle" & "Supraclavicular Block"
2009 Mar	2009 Jobson Symposium on Regional Anaesthesia Recent Developments &
	Outcome
	Lectures "Ultrasound Guidance for Upper Limb Blocks," "Ultrasound Guidance
	for Lower Limb Blocks," Ultrasound Guided Neuraxial and Paravertebral Blocks," "Ultrasound Guided Regional Anaesthesia – Outcome Data" & "Newer
	Ultrasound Applications for Anaesthetic Practice"
2009 Mar	83 <sup>rd</sup> International Anesthesia Research Society Clinical & Scientific Congress,
	San Diego, CA
	Lecture "Ultrasound in Regional Anesthesia"
	Workshops "Advanced Ultrasound Guided Nerve Block" and "Peripheral Nerve
	Blocks: Ultrasound, Simulation and Stimulation"
2009 Jan	One Day Ultrasound Conference, West Kowloon Cluster, Hong Kong, China
	Lectures "Clinical Outcome of Ultrasound Guided Regional Anaesthesia -
	Evidence Based Medicine," "Sonographic Imaging of the Spine" & "Ultrasound Guided Continuous Catheter Technique"
2008 Dec	NYSORA 7th Annual Regional Anesthesia and Acute Pain Management
	Symposium

Lecture "Ultrasound-Guided Regional Anesthesia-Evidence Based Review" Workshop "Ultrasound Guided Sciatic Nerve Blocks" 62<sup>nd</sup> Postgraduate Assembly in Anesthesiology, The New York State Society of 2008 Dec Anesthesiologists, Inc., New York, NY Lecture "Current Approaches to Regional Anesthesia – Ultrasound" Workshop "Ultrasound, Simulation and Stimulation for Peripheral Nerve Blocks" 59th American Society of Anesthesiologists Annual Meeting, San Francisco, 2008 Oct Lectures "Basics of Ultrasonography and Its Pitfalls and Limitations in Nerve Blocks," "Maximizing Benefits of Regional Anesthesia" & "Ultrasound Will Improve Block Quality" Workshops "Peripheral Nerve Blocks: Ultrasound, Simulation and Stimulation," "Ultrasound-Guided Regional Anesthesia and Clinical Skills Workshop," "Cadaver Workshop –Plexus Dissection" & "Cadaver Workshop - Ultrasound Guided Needle Placements" 2008 Sep 21st International Congress of the Israel Society of Anesthesiologists, Tel Aviv. Israel Lectures "State of the Art Detection for Peripheral Nerve Blocks", "Sciatic Nerve Block Using Ultrasound" & "Ultrasound-Guided Regional Anesthesia" 37º Congreso Argentino de Anestesiología - VIII Pan-American Symposium of Regional 2008 Aug Anesthesia, Buenos Aires, Argentina Lectures "Upper Limb Blocks under Ultrasound Guidance," "Lower Limb Blocks under Ultrasound Guidance" and "Ultrasound versus Nerve Stimulation-Evidence Based Data" 2008 July Hull Regional Anaesthesia Symposium & Workshop, Hull, UK Lectures "Ultrasound Guided Nerve Blocks- Upper Limb", "Ultrasound Guided Nerve Blocks-Lower Limb", "Continuous Catheter Regional Anesthesia At Home" & "Abdominal Wall Blocks" Workshops "Upper and Lower Limb Hands On Workshop" & "Operating Room Live Demonstration" 2008 June 25th Annual Pain Symposium, Texas Tech University Health Sciences Center, Lubbock TX Lecture "Ultrasound Imaging for Pain Management" 2008 May The 2008 Bruce Scott Lecture, ESRA (GB & I) Annual Meeting 2008, London, England Lecture "Ultrasound Guided Regional Anesthesia – Is It Here to Stay?" Workshop "Ultrasound" 2008 May 33<sup>rd</sup> American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, May 2008, Cancun, Mexico Moderator "ASRA/ESRA Guidelines for Ultrasound Guided Regional Anesthesia Teaching Curriculum" Workshops "Ultrasound Basic Lower Extremity Workshop" & Intensive *Ultrasound Comprehensive Workshop*" 2008 Apr 5<sup>th</sup> Annual International Symposium of Ultrasound and Regional Anesthesia, Toronto, Canada Lecture "Principles of Ultrasound Guided Catheterization"

2<sup>nd</sup> International Cadaver Workshop ISURA 2008, Innsbruck, Austria 2008 Apr Lecture "Ultrasound Guided Regional Anesthesia" Workshop "Cadaver Lab" 2008 Mar 82<sup>nd</sup> International Anesthesia Research Society Clinical & Scientific Congress, San Francisco, CA Lecture "Regional Anesthesia and Analgesia for Acute Postoperative Pain Control – State of the Art Care" Workshops "Advanced Ultrasound Guided Nerve Block" and "Peripheral Nerve Blocks: Ultrasound, Simulation and Stimulation" 2008 Mar Regional Anesthesia and Ultrasound Applications for Anesthesiologists, Vanderbilt University Medical Center, Department of Anesthesiology, Nashville, TNLecture "Ultrasound Guided Regional Anesthesia and Other Applications" Workshop "Cadaver Lab" 2008 Feb Australasian Symposium on Ultrasound and Regional Anaesthesia, Melbourne, Australia Lectures "Sciatic Nerve Block Using Ultrasound," "New Applications of Ultrasound in Anaesthesia," "Continuous Catheter Techniques" & "The Vertebral Column/Neuraxial Blockade" Workshops "Axillary Block" & "Supraclavicular Block" 2007 Nov American Society of Regional Anesthesia and Pain Medicine Annual Fall Meeting, November 2007, Boca Raton FL Lecture "Ultrasound Guided Blocks" & "Ultrasound Guided Chronic Pain Techniques" Problem Based Learning "Ultrasound Guidance in Acute and Chronic Pain" Midwest Anesthesiology Conference Presented by the Illinois Society of 2007 Nov Anesthesiologists, Chicago, Illinois Lecture "Ultrasound for Regional Anesthesia: Is it Here to Stay?" & "Pro-Con: Ultrasound Guidance Required for all Regional Anesthetics" Workshop "Ultrasound/Regional Anesthesia" 58th American Society of Anesthesiologists Annual Meeting, San Francisco, 2007 Oct California Lectures "Assessing Competency for Ultrasound Guided Regional Anesthesia" & "Ultrasound for Regional Anesthesia" Workshops "Peripheral Nerve Blocks: Ultrasound, Simulation and Stimulation" & "Cadaver Workshop - Ultrasound Guided Needle Placements" ESRA Scandinavian Zone Meeting, Rikshospitalet, Oslo, Norway 2007 Sep Lectures "Ultrasound Aiding Peripheral Nerve Blocks – Upper Extremity" & "Ultrasound Aiding Peripheral Nerve Blocks – Upper Extremity" Workshop "Peripheral Blocks" 2007 Jun 54<sup>th</sup> Annual Meeting Japanese Society of Anesthesiologists, Sapporo, Japan Lectures "The History and Future of Ultrasound Guided Nerve Blocks" & "Ultrasound Guided Peripheral Nerve Blocks" 2007 May Regional Anesthesia and Acupuncture Workshop, Vanderbilt University Medical Center, Department of Anesthesiology, Nashville, TN Lecture "What's New in Ultrasound Guided Nerve Blocks"

Workshop "Ultrasound Guided Neuraxial Blocks" 6<sup>th</sup> Annual Comprehensive Regional Anesthesia Workshop, Uniformed Services 2007 Apr University of The Health Sciences, Bethesda MD Workshop "Ultrasound Techniques" 32<sup>nd</sup> American Society of Regional Anesthesia and Pain Medicine Annual Spring 2007 Apr Meeting, April 2007, Vancouver BC Lecture "Assessing Technical Competency for Ultrasound Guided Regional Anesthesia" Workshop "Intensive Ultrasound Workshop" 4<sup>th</sup> Annual International Symposium on Ultrasound and Regional Anesthesia. 2007 Mar Schwetzingen, Germany Lectures "Lumbar Plexus Block" & "Ultrasound vs. Nerve Stimulator – Review and Outlook" Workshops "Introduction to Lower Limb Blocks" & "Brachial Plexus Below the 2007 Mar 81st International Anesthesia Research Society Clinical & Scientific Congress, Orlando, FL Workshop "Ultrasound and Nerve Stimulation for Lower Extremity" 5th International Conference on Pain Control and Regional Anaesthesia - Hong 2007 Mar Kong, China Lectures "Ultrasound guided peripheral nerve blocks" & "Equipment to improve success rates of peripheral blocks" Workshops "Ultrasound Peripheral Nerve Block" & "Pig Laboratory" 2007 Feb Indiana Society of Anesthesiologists Annual Meeting, Indianapolis, IN Lecture "Ultrasound Guided Regional Anesthesia" Aspen Anesthesia 2007, New Developments and Controversies, Snowmass, CO 2007 Feb Lectures, "Principles of Ultrasound İmaging and Ultrasound Guided Vascular Access", "Ultrasound Guided Brachial Plexus Blocks", "Ultrasound Guided Lumbosacral Plexus and Neuraxial Blocks" & "Can Ultrasound Imaging Change Clinical Outcome?" 2007 Jan 9th Annual Conference, Challenges for Clinicians, The University of Chicago Department of Anesthesia & Critcal Care, St. John, USVI Lectures "Update on Acute Pain Management", "Ultrasound Imaging for Regional Anesthesia and Outcome (Upper Limb Techniques)" & "Ultrasound Imaging for Regional Anesthesia and Outcome (Lower Limb Techniques)" Ateliers d"Echographie en ALR, Strasbourg, France 2006 Dec Lecture "State of the Art and Future of Ultrasound Imaging for Regional Workshop "Interscalene and Supraclavicular Nerve Imaging" 60th Postgraduate Assembly in Anesthesiology, The New York State Society of 2006 Dec Anesthesiologists, Inc., New York, NY Lectures "Improving Success and Minimizing Complications of Regional Anesthesia: The Role of Ultrasound" & "Ultrasound for Regional Anesthesia" 2006 Oct Ultrasound Guidance in Regional Anesthesia: First Interactive Course and Video Workshop, Erasmus Hospital, Brussels, Belgium Lectures "Mid humeral and peripheral nerve blocks", "Popliteal sciatic nerve block" & "Ultrasound machine for regional anesthesia: state of the art" Workshop "Supraclvicular block", "Femoral nerve block" & "Popliteal sciatic nerve block"

2006 Oct 57th American Society of Anesthesiologists Annual Meeting, Chicago, Illinois Lectures "Multimodal Analgesia: Luxury or Absolute Necessity?" "Update on Peripheral Nerve Blocks" & "Ultrasound, Perineural Catheters, Advances in Peripheral Nerve Stimulation: Advances or Added Expense?" Workshops "Continuous Nerve Blocks for Pain Control: In the Hospital and Bevond" "Peripheral Nerve Blocks: Ultrasound, Simulation, and Stimulation" Oregon Society of Anesthesiologists, Fall Meeting, Eugene Oregon 2006 Sep Lectures "Regional Anesthesia, Anatomy of Upper and Lower Extremity Blocks" & "Using Ultrasound to Guide Peripheral Nerve Blocks" Workshop "Ultrasound Guided Regional Anesthesia" 2006 Sep XXV Annual European Society of Regional Anesthesia Congress, Monte Carlo, Monaco Workshop "Ultrasound and Nerve Stimulation in the 21st Century" Sleepless in Seattle, Hold the Mayo: Regional Anesthesia 2006 Conference, 2006 Aug Virginia Mason Medical Center and the Mayo Clinic, Seattle, WA Lecture "Ultrasound for Peripheral Nerve Block" Live Demonstration "Ultrasound Imaging of Peripheral Nerves" 2006 June Transforming Medical Practice, Changing the Role of Ultrasound in Medicine Symposium, Penn Club of New York, New York City, NY Lecture "The Role of Ultrasound in Anesthesiology Practice" 2006 May Regional Anesthesia and Acupuncture Workshop, Vanderbilt University Medical Center, Department of Anesthesiology, Nashville, TN Lecture "Ultrasound Guided Nerve Blocks" Workshop "Ultrasound Guided Peripheral Nerve Blocks" The Chicago Society of Anesthesiologists, Chicago, Illinois 2006 May Lectures "Peripheral Nerve Block for Ambulatory Surgery" and "Purpose Driven Regional Anesthesia: The Role of Ultrasound" 10<sup>th</sup> Annual Symposium on Regional Anesthesia: Controversies and 2006 May Fundamentals in Regional Anesthesia, Hospital for Special Surgery, New York City, NY Lecture "Are the Benefits of Ultrasound Worth the Time, Effort and Cost?" Workshop "Ultrasound Techniques"
Advanced Regional Anesthesia 2006: Invasive Pain Management Techniques and 2006 May Regional Anesthesia Hands-On Workshop, Department of Anesthesiology, Wayne State University, Detroit, MI Lectures "Using Ultrasound For Nerve Location", "Conventional Block Technique vs. Ultrasound" Workshop "Ultrasound for Nerve Blocks" 3rd Annual International Symposium on Ultrasound and Regional Anesthesia, 2006 Apr Toronto, Canada Lecture "Literature Review – What's New" Workshops "Femoral and Psoas Compartment", "Interscalene and Supraclavicular Blocks' 2006 Apr American Society of Regional Anesthesia & Pain Medicine – 31st Spring Meeting 2006, Rancho Mirage, California Lecture "The Role of Ultrasound in Modern Regional Anesthesia: Current and Future Role", "Basic Nerve Imaging and Ultrasound Guided Techniques" and "Pro-Con Debate: Ultrasound vs. Nerve Stimulator for Peripheral Nerve Blocks" Intensive workshop "Ultrasound guided peripheral nerve blocks"

2006 Mar 2<sup>nd</sup> World Congress on Regional Anaesthesia and Pain Therapy, Rio de Janeiro, Lectures "Stimulating vs. Non Stimulating Catheters", "Applying Ultrasound to Regional Anesthesia" and "Neuraxial Opioid Analgesia" Workshop "Use of Ultrasound for Regional Anesthesia" 2006 Mar Kentucky Society of Anesthesiologists Annual Spring Meeting, Covington, Kentucky Lectures "Ultrasound Guided Peripheral Nerve Blocks" and "Continuous Peripheral Nerve Blocks" Problem Based Learning Discussion "Ultrasound Guided Regional Anesthesia" 2006 Feb Continuing Medical Education Course, Gulfcoast Ultrasound Institute, Inc., St Pete Beach, FL Lecture "Ultrasound Guided Nerve Block Techniques and CVC Placement for the Anesthesiologist" 59th Postgraduate Assembly in Anesthesiology, The New York State Society of 2005 Dec Anesthesiologists, Inc., New York, NY Lecture "Improving Your Success Rate: Ultrasound Imaging for Regional Anesthesia' 2005 Nov 4th International Conference on Pain Control and Regional Anaesthesia, Cape Town, South Africa Lectures "Peripheral blocks for ambulatory surgery", "Ultrasound imaging in regional anaesthesia", "Cost-effectiveness of ropivacaine and levobupivacaine In postoperative pain' Workshops "How to set up an Acute Pain Service? North American perspective". "Imaging techniques in regional anaesthesia – practical issues" Advances in Physiology and Pharmacology in Anesthesia and Critical Care, Wake 2005 Nov Forest University, Hilton Head, SC Lecture "Ultrasound for Regional Anesthesia and Vascular Access" Workshop "Infraclavicular and Axillary Blocks" 56th American Society of Anesthesiologists Annual Meeting, Atlanta, Georgia 2005 Oct Lecture "Ultrasonographic Anatomy and Guided Blocks of the Peripheral Nerve" Moderator "Ultrasound Guided Techniques for Regional Anesthesia" Workshops "Continuous Nerve Blocks for Pain Control: In the Hospital and Beyond" "Peripheral Nerve Blocks" First Annual Meeting of the Orthopedic Anesthesia, Pain and Rehabilitation 2005 Oct Society, Atlanta, Georgia Lecture "Principles of Nerve Location Using Ultrasound" Workshop "Nerve Location Using Ultrasound" XI European Society of Regional Anesthesia Local Meeting, Santiago de 2005 Sept Compostela, Spain Lecture "Ultrasonography and plexus blocks" Workshops "Ultrasound applied to brachial plexus block" and "Ultrasonography in the practice of perineural blocks" XI European Society of Regional Anesthesia Annual Meeting, Berlin, Germany 2005 Sept Lectures "Peripheral blocks in ambulatory surgery", "Perineural and incisional techniques at home" and "Imaging techniques in regional anaesthesia" Workshops "Ultrasound guided upper limb blocks in adults and children" and "Ultrasound guided lower limb blocks" 2005 Jun Austrian Postgraduate Assembly, AUSTRICA 2006, Vienna, Austria Lectures "A Ray of Hope, Part 2: Sonoanatomy" and "Haemostasis and its Importance in Decision-Making: Aspirin - so what?"

2005 May	4th Annual Comprehensive Regional Anesthesia Workshop, Bethesda, Maryland Workshop, "Ultragound Imaging for Pagional Anasthesia"
2005 Apr	Workshop "Ultrasound Imaging for Regional Anesthesia"  2nd Annual International Symposium on Ultrasound and Regional Anesthesia, Schwetzingen, Germany
	Lectures "Ultrasound imaging for brachial plexus blocks above the clavicle", "Ultrasound imaging for sciatic nerve blocks"
2005 Apr	American Society of Regional Anesthesia & Pain Medicine - 30th Spring Meeting 2005, Toronto, Canada
	Lecture "Ultrasound imaging in regional anesthesia"
2004 Dec	Intensive <i>workshop "Ultrasound guided peripheral nerve blocks"</i> 3 <sup>rd</sup> Annual Comprehensive Review of Regional Anesthesia, The Department of
2004 Dec	Anesthesiology, St. Luke's & Roosevelt Hospitals and New York School of Regional Anesthesia, New York, New York
	Lecture "What You See is What You Get: Ultrasound-Guided Nerve Blocks"
	Panel "Upper Extremity Blocks: Mistakes to Avoid"
2004 Oct	55th American Society of Anesthesiologists Annual Meeting, Las Vegas, Nevada Lecture "What You See Is What You Get: Will Ultrasound Become Standard
	Equipment for Regional Blocks"
	Lecture "Neural Localization With Ultrasound"
	Workshop "Continuous Nerve Blocks for Pain Control: In the Hospital and Beyond"
2004 Oct	6 <sup>th</sup> Regional Anesthesia International Symposium, 2 <sup>nd</sup> Orthopedic Anesthesia,
200.000	Pain and Rehabilitation Symposium, Las Vegas, Nevada
	Workshop "Use of Ultrasound for Peripheral Nerve Blocks"
2004 Aug	7th Pan American Symposium on Regional Anesthesia and Pain Control, Recife,
	Pernambuco, Brazil Lecture "The Use of Ultrasound for Regional Anesthesia"
	Workshop "Ultrasound Guided Brachial Plexus Blocks"
2004 May	2nd Joint Scientific Meeting of the American Pain Society and the Canadian Pain
2	Society, Vancouver
2004 4	Lecture "Regional Analgesic Techniques For Ambulatory Same-day Surgery"
2004 Apr	International Symposium on Ultrasound and Regional Anesthesia, Schwetzingen, Germany
	Lectures "Ultrasound guided brachial plexus blocks", "The past, present and
	future of regional anesthesia in perioperative medicine: an outlook"
2004 Mar	American Society of Regional Anesthesia & Pain Medicine - 29th Spring Meeting 2004, Orlando, FL
	Master Class "Making peripheral nerve blocks work in a busy practice"
	Lecture "Using ultrasound for nerve localization" "Ultrasound-an innovative
	approach to teaching regional anesthesia"  Intensive workshop "Mastering the lumber and leaves and lower extremity
	Intensive workshop "Mastering the lumbosacral plexus and lower extremity peripheral blockade: A comprehensive approach to anatomy and clinical
	applications"
2004 Feb	3 <sup>rd</sup> International Conference on Pain Control and Regional Anaesthesia, Santiago,
	Chile
	Lectures "Adjuvants in Neuraxial Blocks", "Does postoperative pain
	management affect outcome? The role of epidural technique", "Ultrasound
	Guided Peripheral Nerve Blocks"
	Workshops "Update on Transient Neurologic Syndrome", "Upper Extremity
	Blocks"
2004 Feb	Continuing Medical Education Course, Gulfcoast Ultrasound Institute, Inc.,
	Chicago

	Lecture "Ultrasound Guided Nerve Block Techniques and CVC Placement for the
	Anesthesiologist"
2003 Oct	54 <sup>th</sup> American Society of Anesthesiologists Annual Meeting, San Francisco, California
	Lecture "Lower Extremity Peripheral Nerve Block: Everything You Need to Know From the Experts- Video Presentation of Techniques"
2003 Oct	XIth Live Videoconference on Regional Anesthesia, Toulouse, France
	Workshop "Ultrasound Guided Supraclavicular Block"
2003 Apr	Lecture, 28th American Society of Regional Anesthesia and Pain Medicine Annual
	Spring Meeting, San Diego, California
2002 1	"Imaging Techniques for Peripheral Nerve Blocks"  Intensive Workshop Mastering the Lymbosopul Playus and Lower Extremity
2003 Apr	Intensive Workshop, Mastering the Lumbosacral Plexus and Lower Extremity
	Peripheral Blockade: A Comprehensive Approach to Anatomy & Clinical
	Applications, 28 <sup>th</sup> American Society of Regional Anesthesia and Pain Medicine Annual Spring Meeting, San Diego, California
2003 Apr	Lecture, Controversies and Fundamentals in Regional Anesthesia 2003, 7 <sup>th</sup>
2003 Api	Annual Symposium, Hospital for Special Surgery, New York, New York
	"Who says nerve stimulators are the best way to go?"
2002 Nov	Lecture, The 22 <sup>nd</sup> Annual Meeting of Japan Society for Clinical Anesthesia, Kofu,
2002 INOV	Japan
	"Patient Controlled Epidural Analgesia"
2002 May	Intensive Workshop, Mastering the Lumbosacral Plexus and Lower Extremity
2002 Way	Peripheral Blockade: A Comprehensive Approach to Anatomy & Clinical
	Applications, American Society of Regional Anesthesia and Pain Medicine
	Annual Meeting, Chicago, Illinois
2002 Apr	Master Class, American Society of Regional Anesthesia and Pain Medicine
	Annual Meeting, Chicago, Illinois
	"Making Upper Extremity Blocks Work in a Busy Clinical Practice"
2001 Oct	Lecture, Society of Ambulatory Anesthesia Mid Year Meeting, New Orleans,
	Louisiana
	"New Pharmacological Techniques for Postoperative Analgesia"
2001 Oct	Lecture, Panel Speaker, American Society of Anesthesiology Annual Meeting,
	New Orleans, Louisiana
	"Recent Advances in Intravenous Regional Anesthesia"
2001 Aug	Lectures, 8th Annual Comprehensive Review of Pain Management, American
	Society of Regional Anesthesia and Pain Medicine, Newport Beach, CA
	"Local Anesthetics"
	"Evaluation and Management of Cancer Pain"
	"Acute Pain"
2001 Aug	Lecture, International Symposium Ambulatory Surgery in the New Millennium,
	Stockholm, Sweden
	"Regional Techniques for Ambulatory Surgery- Peripheral Nerve Blocks in Day
	Surgery"
2001 June	Lecture, Society for Education in Anesthesia Annual Meeting, Cleveland, Ohio "Acquiring Regional Anesthesia Skills"

2001 June	Workshop, Society for Education in Anesthesia Annual Meeting, Cleveland, Ohio "Teaching Regional Anesthesia- What Works"
2001 May	Master Class, American Society of Regional Anesthesia and Pain Medicine Annual Meeting, Vancouver, BC "Making Upper Extremity Blocks Work in a Busy Clinical Practice"
2000 May	American Society of Regional Anesthesia and Pain Medicine Annual Meeting, Vancouver, BC Lecture " Arm Blocks for Outpatients"
2001 Feb	Lectures, Mayo Clinic Symposium on Anesthesia, Perioperative Medicine and Equipment, Orlando, Florida "Treatment of Postdural Puncture Headache" "Cox-2 Inhibitors: Efficacy and Side Effects"
2000 Sept	Panel member, "Expert "On Call" Session"  Lecture, Symposium on Understanding Regional Anesthesia and Perioperative Pain Control, The American Society of Regional Anesthesia, Syracuse, NY "Advantages of Regional Anesthesia", "Brachial Plexus Blockade"
2000 Aug	Lecture, 5 <sup>th</sup> Pan-American Symposium on Regional Anesthesia and Pain Control "New Technological Advances In Regional Anesthesia"
2000 Aug	Interactive Session, 5 <sup>th</sup> Pan-American Symposium on Regional Anesthesia and Pain Control "Analgesic Adjuncts for Regional Anesthesia: What Do I Use?"
2000 Aug	Workshop, 5 <sup>th</sup> Pan-American Symposium on Regional Anesthesia and Pain Control "Glass Spine Model"
2000 June	Chairman, AstraZeneca Symposium, 12 <sup>th</sup> World Congress of Anesthesiologists, Montreal, Canada "An integrated approach to anaesthesia and pain management: Today and tomorrow"
2000 June	Chairman, 12 <sup>th</sup> World Congress of Anesthesiologists, Montreal, Canada "Regional Analgesia vs. Systemic Analgesia"
2000 June	Lecture, 12 <sup>th</sup> World Congress of Anesthesiologists, Montreal, Canada "Reflections on the Blood Patch after 40 Years"
2000 June	Lecture, International Symposium on Regional Anesthesia & Pain Medicine, Quebec, Canada "Regional for Upper Extremity"
2000 Mar	Master Class, American Society of Regional Anesthesia and Pain Medicine Annual Meeting, Orlando, FL "Recent Technical Advances in Regional Anesthesia and Pain Medicine"
2000 Mar	Workshop, American Society of Regional Anesthesia and Pain Medicine Annual Meeting, Orlando, FL " Brachial Plexus Above the Clavicle"
2000 Feb	Lecture, Symposium on Understanding Regional Anesthesia and Perioperative Pain Control, The American Society of Regional Anesthesia, New Orleans, LA "Brachial Plexus Blockade"  Workshop "Upper Extremity Anesthesia"

1999 Dec	Lecture, Current Concepts in Acute, Chronic and Cancer Pain Management, The World Foundation for Pain Relief and Research, New York, NY
	"Pain Management for the Out—Patient Surgical Patient"
1999 Dec	Lecture, Symposium on Understanding Regional Anesthesia and Perioperative Pain Control, The American Society of Regional Anesthesia, Cincinnati, OH "Regional Techniques for Postoperative Pain: Making the Pain Service Work" "Advantages of Regional Anesthesia"
1999 Sept	Lecture, Symposium on Understanding Regional Anesthesia and Perioperative Pain Control, The American Society of Regional Anesthesia, Milwaukee, WI "Regional Techniques for Postoperative Pain: Making the Pain Service Work"
1999 Sept	Workshop, Symposium on Understanding Regional Anesthesia and Perioperative Pain Control, The American Society of Regional Anesthesia, Milwaukee, WI "Upper Extremity Anesthesia"
1999 May	Lecture, American Society of Regional Anesthesia Annual Meeting, Philadelphia PA " <i>Regional Anesthesia of the Thorax</i> "
1999 May	Workshop, American Society of Regional Anesthesia Annual Meeting, Philadelphia PA " <i>Brachial Plexus Block Below the Clavicle</i> "
1999 May	Panel Discussion, American Society of Regional Anesthesia Annual Meeting, Philadelphia PA " <i>International Perspectives on Regional Anesthesia</i> "
1999 Feb	Lecture, Symposium on Understanding Regional Anesthesia and Perioperative Pain Control, The American Society of Regional Anesthesia, Houston, TX "Brachial Plexus Blockade"
1999 Feb	Workshop, Symposium on Understanding Regional Anesthesia and Perioperative Pain Control, The American Society of Regional Anesthesia, Houston, TX "Upper Extremity Anesthesia"
1998 Sept	Lecture, Symposium on Understanding Regional Anesthesia and Perioperative Pain Control, The American Society of Regional Anesthesia, Rochester, NY "Upper Extremity Blocks: Perioperative Applications"
1998 Sept	Workshop, Symposium on Understanding Regional Anesthesia and Perioperative Pain Control, The American Society of Regional Anesthesia, Rochester, NY "Brachial Plexus Blocks"
1998 May	Lecture, American Society of Regional Anesthesia Annual Meeting, Seattle WA "Recent Technological Advances in Regional Anesthesia and Pain Management"
1998 May	Workshop, American Society of Regional Anesthesia Annual Meeting, Seattle WA "Combined Spinal Epidural Anesthesia"
1996 Sept	Lecture, Symposium on Regional Anesthesia in the perioperative period, The American Society of Regional Anesthesia, Cambridge, MA "Thoracic Epidural Anesthesia for Chest and Upper Abdominal Surgery"
1995 Sept	Lecture, University of California, San Francisco Annual Refresher Course-Changing Practice of Anesthesia, San Francisco, CA "Chronic Pain: Pharmacologic Options when Blocks Fail"
1995 May	Lecture, Symposium on Regional Anesthesia for Surgery, The American Society of Regional Anesthesia, Phoenix, Arizona " <i>Epidural Anesthesia</i> "

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1995 Mar	Workshop, University of California, San Francisco Continuing Medical Education	
	Course, San Francisco "Fiberoptic Airway Management"	
1994 Nov	Workshop, University of California, San Francisco, Continuing Medical	
	Education Course, San Francisco, CA	
	"Fiberoptic Airway Management"	
1994 Oct	Workshop, American Society of Anesthesiology Annual Meeting, San Francisco	
	"Interactive Video Workshop on Regional Anesthesia"	
1994 Aug	Lecture, Symposium on Regional Anesthesia for Surgery, The American Society	
	of Regional Anesthesia, Burlingame, CA	
	"Regional Anesthesia for Thoracic and Upper Abdominal Surgery"	
1994 Apr	Workshop, The American Society of Regional Anesthesia meeting, Chicago	
	"Interpleural, Intercostal and Thoracic Sympathetic Block"	
1993 Sept	Lecture, University of California, San Francisco Annual Refresher Course-	
	Changing Practice of Anesthesia, San Francisco, CA, USA	
	"The Basics of Postoperative Epidural Pain Management"	

## **National Meetings**

2012 Feb	2 <sup>nd</sup> Annual UBC Whistler Anesthesiology Summit, Whistler, Canada
	Lectures "Advances in Ultrasound Guided Regional Anesthesia and Pain
	Medicine" "Perioperative Use of Ultrasound for Anesthesia" "Case Studies and
	Panel Discussion"
	Workshop "Ultrasound Regional Workshops"
2010 Jun	Canadian Anesthesiologists' Society 66th Annual Meeting, Toronto, Canada
	Lectures "Increasing Use of Ultrasound in Anesthesia" & "Ultrasound Guided
	Regional Anesthesia- an Evidence Based Review"
2010 May	Department of Anesthesia, North York General Hospital, North York, Ontario
	Lecture "How Regional Anesthesia Can Change Patient Care"
2009 Nov	CSTAR's Varkey Regional Anesthesia Update 2009, University of Western
	Ontario, London, Ontario
	Lectures "Basics of Ultrasonography" "Interscalene Block" "Has Ultrasound
	Made a Difference to Outcome?" & "Spine Imaging"
	Workshop "Live Ultrasound Guided Nerve Block Demonstration"
2009 Nov	Mendelson Lecture, Anaesthetic Practice 2009 conference, University of Toronto,
	Toronto
	Lecture "Renaissance of Regional Anesthesia"
2008 Oct	Third Pediatric Interventional Radiology Symposium, Toronto, Ontario
	Lecture "Ultrasound Guided Nerve Blocks"
2008 Sep	15 <sup>th</sup> Annual Regional Anesthesia and Pain Medicine Conference, Continuing
	Medical Education, University of Toronto
	Lecture "Recent Advances in Ultrasound Guided Nerve Blocks"
	Workshop "Intensive Upper Limb Workshop" & "Intensive Lower Limb
	Workshop"

2008 Sep	University of Western Ontario, Cadaver Dissection and Ultrasound Workshop, London, Ontario
2008 July	Ultrasound for Pain Medicine Workshop, Sunnybrook Health Science Center Lecture "Principles of Ultrasound Guided Procedures"
2000 1	Workshop "Ultrasound Guided Blocks"
2008 June	Department of Interventional Radiology, Hospital for Sick Children, Toronto, Ontario, Canada
	Lecture "Ultrasound Imaging for Pain Management"
2008 June	Canadian Anesthesiologists' Society 64 <sup>th</sup> Annual Meeting, Halifax, Canada Workshop "Advanced Cadaveric Ultrasound Blocks"
2008 Feb	13 <sup>th</sup> Annual Anesthesiology Winterlude Symposium on Perioperative Challenges and Controversies, University of Ottawa, Ottawa, Canada Lecture "What's New in Regional Anesthesia" Workshop "Sonoanatomy"
2007 Sep	14 <sup>th</sup> Annual Regional Anesthesia and Pain Medicine Conference, Continuing
2007 Scp	
	Medical Education, University of Toronto
	Lecture "Ultrasound Guided Regional Anesthesia- What is New?"
2007 F 1	Workshop "Intensive Upper Limb Workshop"
2007 Feb	The University Health Network Interdisciplinary Pain Conference, Toronto, Canada
	Lecture "Emerging Practices in Regional Anaesthesia"
2006 Dec	The Varkey Continuous Catheter Regional Anesthesia and Anatomy Workshop Lectures "Case Vignettes" & "Ultrasound for Vascular Access"
	Workshops "Pig Laboratory", "Live Nerve Block Demonstration" & "Volunteer Scanning"
2006 Sep	51st Annual Ontario Anesthesia Meeting, Burlington, Ontario
1	Lecture "Ultrasound Guidance: Changing the Course of Regional Anesthesia"
2006 Sep	13 <sup>th</sup> Annual Regional Anesthesia and Pain Medicine Conference, Continuing Medical Education, University of Toronto
	Workshop "Intensive Ultrasound" & "Intensive Upper Limb Workshop"
2006 June	Canadian Anesthesiologists' Society 62 <sup>nd</sup> Annual Meeting, Toronto, Canada Lecture "Update on Using Ultrasound"
	Workshop "Comprehensive thoracic epidural and upper/lower extremity blocks
	using nerve stimulation and ultrasound techniques – a hands-on workshop"
	Workshop "Lower extremity blocks using nerve stimulation and ultrasound- a
20064	hands-on workshop"
2006 Apr	The Toronto Anesthesia Symposium 2006, Toronto
	Lecture "Ultrasound for Regional Anesthesia"
2005 Dec	The Varkey Continuous Catheter Regional Anesthesia and Anatomy Workshop,
	University of Western Ontario, London, Ontario
	Lecture "Ultrasound Imaging for Regional Anesthesia and Vascular Access"
	Workshop "Pig Lab"
2005 Nov	North York General Hospital, Department of Anesthesia, North York, Ontario
	Lecture "Ultrasound for Regional Anesthesia and Vascular Access"

2005 Sept	12 <sup>th</sup> Annual Regional Anesthesia and Pain Medicine Conference, Continuing
	Medical Education, University of Toronto
	Lecture "Peripheral Stimulating Catheters" "Avoiding Neurologic Injury- the
	Role of Ultrasound Imaging"
	Workshop "Intensive Ultrasound"
2005 Jun	Canadian Anesthesiologists' Society 61st Annual Meeting, Vancouver, Canada
	Lecture "Multimodal Pain Therapy to Aid Surgical Rehabilitation: Regional
	Analgesic Considerations"
	Workshop "Ultrasound Guided Nerve Block"
	Panelist "The Art and Science of Ultrasonographic Guided Regional Anesthesia" "Thoracic Epidural Placement Made Easy"
2005 May	Southlake Regional Health Centre, Queensville Lecture Series, Newmarket,
2000 1.100	Ontario
	Lecture "Ultrasound Imaging for Regional Anesthesia"
2004 Dec	The Varkey Continuous Catheter Regional Anesthesia and Anatomy Workshop,
	London, Ontario
	Lectures "Ultrasound Imaging: Case Vignettes", "Ultrasound Guided Vascular
	Access"
	Workshop "Pig Lab Demonstration"
2004 Nov	Anaesthetic Practice 2004, University of Toronto, Toronto, Ontario
, , , , , , , , , , , , , , , , , , , ,	Workshop "Ultrasound Imaging for Regional Anesthesia"
2004 Oct	University of Western Ontario
	Lecture "Basics of Ultrasound Guided Blocks"
	Workshop "Ultrasound Guided Brachial Plexus Blocks"
2004 Jun	Canadian Anesthesiologists' Society 60th Annual Meeting, Quebec City, Quebec
	Moderator, "Applying Ultrasound Technology in Anesthesia" Symposium
	Lecture "Ultrasound For Line Placement"
2004 May	45th Annual McGill Anesthesia Update, Montreal, Quebec
,	Lectures "Regional Anesthesia for Day Surgery", "Continuous Peripheral
	Blockade"
	Workshop "Ultrasound in Regional Anesthesia"
2003 Oct	Department of Anesthesia, William Osler Health Center, Brampton, Ontario,
	Canada
	Lecture "Managing Pain with Opioids"
2003 Sep	The Third Princess Margaret Hospital Conference: New Developments in Cancer
-	Management, Toronto, Ontario
	Lecture "Intraspinal Analgesia: What Every Oncologist Should Know"
2003 Sep	10th Annual Regional Anesthesia and Pain Medicine Conference, Continuing
-	Medical Education, University of Toronto
	Lecture "Ultrasound Imaging for Peripheral Nerve Blocks"
	Workshop "Inter-Sternocleidomastoid Block"
2003 June	Canadian Anesthesiologists' Society 59th Annual Meeting, Ottawa, Ontario
	Workshop "Ultrasound and Regional Techniques"
2003 Mar	13th Annual Hospice Palliative Care Conference, Toronto, Canada

	Workshop "Management of Malignant Pain: Anesthesiologist's Perspectives"
2003 Jan	The Toronto Chapter of Oncology Nurses Group, Toronto, Canada
	Lecture "Anesthetic Interventions For Cancer Pain"
2002 Sep	9th Annual Regional Anesthesia and Pain Medicine Conference, Continuing
	Medical Education, University of Toronto
	Lecture "New Nonsteroidal Anti-inflammatory Drugs"
	Workshop "Inter-Sternocleidomastoid and Infraclavicular Brachial Plexus Blocks"
2002 Apr	Update in General Surgery 2002, 42 <sup>nd</sup> Annual Course for Practising Surgeons,
•	University of Toronto, Toronto, Ontario
	Lecture "Epidural Anesthesia versus the Pain Pump"
2002 Feb	Winterlude Symposium "Controversies in Anesthetic Practice"
	University of Ottawa, Ottawa, Ontario
	Lecture "What Is The Best Local Anesthetic For Acute Pain Management?"
2002 Feb	Workshops, Second Annual Mont Tremblant Anesthesia Meeting,
	Quebec
	"Blocks for Arm Surgery"
	"Blocks for Leg Surgery"
2001 Dec	Lecture, Anaesthetic Practice 2001, Focus on Patient Safety, University of
	Toronto, Toronto, Ontario
	"Treatment of Postdural Puncture Headaches"
2001 Nov	Lecture and Workshops, The Varkey Continuous Catheter Regional Anesthesia &
	Anatomy Workshop, London Health Sciences Centre, London, Ontario
	"How to Set Up Ambulatory Regional Anesthesia Service"
	"Intersternocleidomastoid Block"
	"Sciatic Block: Labat's Approach"
2001 Sept	Lecture, 8th Annual Regional Anesthesia and Pain Medicine Conference,
	Continuing Medical Education, University of Toronto
	"New Local Anesthetics"
2001 May	Lecture, Windsor Regional Hospital, Western Campus, Windsor, Ontario, Canada
	"Management of Epidural/Spinal Catheter For Cancer Pain"
2001 May	Lecture, The Hospice of Windsor, Inc., Windsor, Ontario, Canada
	"Management of Epidural/Spinal Catheter For Cancer Pain"
2001 May	Lecture, Markham-Stouffville Hospital, Department of Anesthesia, Ontario,
	Canada
2001 3.6	"Continuous Catheter Techniques for Ambulatory Anesthesia"
2001 Mar	Lecture, Department of Anesthesia, St. Joseph's Health Centre, Ontario, Canada
2001 3.6	"Continuous Peripheral Nerve Catheter and Infusion"
2001 Mar	Lecture, Surgical Services Rounds, University Health Network, Toronto, Canada "Pain Management at UHN: An Update"
2000 Oct	Workshop, 7th Annual Regional Anesthesia and Pain Medicine Conference,
	Continuing Medical Education, University of Toronto
	"Brachial Plexus Blocks Above the Clavicle"

2000 Oct	Lecture, Neuroscience Rounds, Toronto Western Hospital, University Health Network "Analgesic Care for Patients After Major Spinal Surgery"
2000 Oct	Workshop, 7 <sup>th</sup> Annual Pain and Symptom Management Conference, Continuing Medical Education, University of Toronto
• • • • •	"Management of Epidural Catheters in Home / Hospital Setting"
2000 Sept	Lecture, 7th Annual Regional Anesthesia and Pain Medicine Conference,
	Continuing Medical Education, University of Toronto
	"Treatment of Postdural Puncture Headache"
2000 June	Lecture, Ambulatory Anesthesia 2000, Montreal, Canada
	"Why is Regional Anesthesia the Best for Ambulatory Anesthesia?"
2000 Apr	Lecture, Department of Anesthesia, William Osler Health Center, Brampton,
	Ontario, Canada
	"How to set up an Acute Pain Service"
2000 Mar	Lecture, Palliative Care Grand Rounds, The Temmy Latner Centre for Palliative
	Care and the Hospice Palliative Care NETwrok Project, Toronto, Ontario
	"Anaesthetic Interventions in Cancer Pain Management"
2000 Mar	Lecture, Toronto Vascular Surgery Symposium, Toronto, Ontario
	"Are there significant benefits to epidural anesthesia for elective vascular surgery?"
1999 Oct	Workshop, Regional Anesthesia and Analgesia '99 Conference, Continuing
	Medical Education, University of Toronto
	"Psoas Compartment and 3-in-1 Blocks"
1999 Oct	Lecture, Grand Round, Department of Anesthesia, Royal Columbian Hospital,
	British Columbia
	"Recent Advances in Regional Anesthesia"
1999 May	Lecture, Seventeenth Annual Can-Am Clinical Anaesthesia Conference, Niagara
3	-On-The-Lake, Ontario
	"What's New in Spinal Anesthesia"
1999 May	Panel Discussion, Seventeenth Annual Can-Am Clinical Anaesthesia Conference,
	Niagara-On-The-Lake, Ontario
	"Controversies in Ambulatory Anesthesia"
1999 May	Lecture, McGill Anaesthesia Update '99, Montreal, Quebec
1999 1 <b>via</b> y	"What's New in Spinal Anaesthesia"
1999 May	Lecture, McGill Anaesthesia Update '99, Montreal, Quebec
1))) iviay	"Managing Thoracic Epidurals"
1999 Apr	Lecture, Victoria Order of Nursing Canada, Markham, Ontario
1777 Api	"Epidural Analgesia"
1000 Apr	Lecture, North York General Hospital Department of Anesthesia Round
1999 Apr	· · · · · · · · · · · · · · · · · · ·
1000 15	"Patient Controlled Epidural Analgesia"
1999 Mar	Lecture, The Toronto Anaesthesia Symposium, Toronto, Ontario
	"Update on Local Anesthetic Pharmacology"
1998 Nov	Lecture, Anaesthetic Practice '98, Continuing Medical Education, University of Toronto "Lidocaine Spinals— Why the Bad Rap?"

1998 Nov	Problem Based Learning Workshop, Anaesthetic Practice '98, Continuing Medical Education, University of Toronto "Trouble Shooting in Regional
1998 Oct	Anaesthesia"  Lecture, Regional Anesthesia and Analgesia '98 Conference, Continuing Medical
1998 Oct	Education, University of Toronto " <i>Patient Controlled Epidural Analgesia</i> " Lecture, Regional Anesthesia and Analgesia '98 Conference, Continuing Medical Education, University of Toronto " <i>Spinal Anesthesia in Outpatients</i> "
1998 Oct	Workshop, Regional Anesthesia and Analgesia '98 Conference, Continuing Medical Education, University of Toronto "Intercostal and Suprascapular Nerve Blocks"
1998 Oct	Lecture, 13 <sup>th</sup> Annual Ontario Peri–Anaesthesia Nurses Association Conference "Patient Controlled Epidural Analgesia"
1998 June	Refresher Course Lecture, Canadian Anesthetists' Society Annual Meeting, Toronto "Recent Advances in Regional Anesthesia and Pain Management"
1998 June	Workshop, Canadian Anesthetists' Society Annual Meeting, Toronto, "Upper Extremity Brachial Plexus Block"
1998 June	Workshop, Canadian Anesthetists' Society Annual Meeting, Toronto "How to Set-up a Regional Anaesthesia Program"
1997 Sept	Lecture, Regional Anesthesia and Analgesia '97 Conference, Continuing Medical Education, University of Toronto " <i>Intravenous Regional Anesthesia</i> "
1997 Sept	Workshop, Regional Anesthesia and Analgesia '97 Conference, Continuing Medical Education, University of Toronto "Use of Nerve Stimulator and IV Regional Anesthesia"
1997 Apr	Workshop, Toronto Anaesthesia Symposium, Toronto "Peripheral Nerve Blocks"
1997 Mar	Lecture, Academy of Medicine, Toronto, Canada "The Changing Practice of Regional Anesthesia"
1996 Oct	Lecture, Anesthesia Round, North York General Hospital, North York, Canada "What's New in Spinal Anesthesia"
1996 Oct	Lecture, Anesthesia Round, Women's College Hospital, University of Toronto, "Interscalene Brachial Plexus Block for Shoulder Surgery"
1996 Oct	Lecture, Toronto Critical Care Medicine & Trauma Symposium, Toronto "Regional Analgesia in the ICU"
1996 Sept	Lecture, Regional Anesthesia '96 Conference, Continuing Medical Education, University of Toronto "What's New in Spinal Anesthesia"
1996 Sept	Workshop, Regional Anesthesia '96 Conference, Continuing Medical Education, University of Toronto " <i>Thoracic or Lumbar Epidural?</i> "
1996 Sept	Workshop, Regional Anesthesia '96 Conference, Continuing Medical Education, University of Toronto " <i>Thoracic Epidural Anesthesia</i> "
1996 June	Workshop, Ontario Medical Association/Canadian Anesthetists' Society Annual Meeting, Windsor, Canada "Lower Extremity Block"
1996 June	Lecture, Case Discussion, Canadian Anesthetists' Society Annual Meeting, Montreal "Reflex Sympathetic Dystrophy"
1996 June	Workshop, Canadian Anesthetists' Society Annual Meeting, Montreal, Canada "Upper Extremity Block"

1993 Oct	Lecture, Anesthesia Round, Naval Hospital, Oakland, California, USA
	"Continuous Spinal Anesthesia"
1993 Oct	Lecture, Anesthesia Round, Naval Hospital, Oakland, CA, USA
	"Current Controversies In The Efficacy of Postoperative Epidural Analgesia"
1991 Oct	Lecture, Anaesthesia Round, York County Hospital, Newmarket, Canada
	"Patient Controlled Analgesia"
1991 May	Lecture, Anaesthesia Rounds, Telemedicine Canada, Continuing Medical
	Education, University of Toronto, "Management of Postoperative Pain"
1990 March	Lecture, Anaesthesia Round, Women's College Hospital, Toronto
	"Acute Pain Management by a Postoperative Pain Service."