

# Curriculum Vitae

**Alain Yvan Belanger**

**BSc, MSc, PhD**

**Citizenship:** Canadian

**Civil status:** Married with three children

**Address:** 76 Place Bon-Air, Levis, Qc, G6Z 7A4

**Education:** BSc Physiotherapy, University of Montreal, 1973

MSc Kinesiology, Simon Fraser University, 1976

PhD Neurosciences, McMaster University, 1982

**Employment:** Physical therapist, Ste-Mary Hospital, 1973-1974

Assistant Professor, Physiotherapy program, Laval University, 1976-1983

Associate Professor, Physiotherapy program, Laval University, 1984-1988

Full Professor, Physiotherapy program, Laval University, 1989-2009

Retired Professor, 2010

**Consultant:** Founder and President of Physiometrix Ltd, 1992 - today

**Teaching:** Human anatomy, biomechanics, kinesiology, human neuromuscular physiology, pain, therapeutic electrophysical agents

**Honors:** Constance Beattie Award, Canadian Physiotherapy Association

Pre-doctoral Fellowship Award, Muscular Dystrophy Association of Canada

Fellowship Award, World Health Organization

*Prix d' Excellence*, from the *Ordre de la Physiothérapie du Québec*, in

recognition of my textbook entitled *Evidence-Based Guide to Therapeutic*

*Physical Agents*

## Recognition

Physical therapist, Paramedical Team, XXI<sup>e</sup> Olympic Game, Montreal, 1976

Physical therapist, Paramedical Team, Canada Games, St-Johns, 1977

Member, Editorial Board, Physiotherapy Canada Journal, 1982-1987

Member, Quebec Task Force on Spinal Disorders, sponsored by the Quebec Institute for Workers' Health and Safety, 1984-1987

Consultant for Medtronic Ltd, Electrical Stimulation Division, Minneapolis, 1986

Member, Consultative Council on Technological Aids, Ministry of Social

Affairs, Government of Quebec, 1987-1988

Scientific Editor and Chair of the Editorial Board, Physiotherapy Canada Journal, 1987-1990

Consultant, B.V. Enraf Nonius Delft, Electrical Stimulation Division, 1988

Member, Task Force on the Reduction of Back Injuries in Health Workers, Quebec

Ministry of Health and Welfare, 1989

Member, Board of Directors, Canadian Physiotherapy Association (CPA), 1991-1995

Director-at-large Research, CPA, 1991-1993

Member, Editorial Board, Physiotherapy Theory and Practice Journal, 1992-2002

Director-at-large Education and Research, CPA, 1993-1995

Member of the Executive Committee, Board of Directors, CPA, 1994-1995

President Elect, Canadian Physiotherapy Association, 1996-1997

Member, Board of Directors and Executive Committee, CPA, 1995-1997

President of the Canadian Physiotherapy Association, 1997-1999

Signature of first publishing contract with Wolters Kluwers Health - Lippincott Williams & Wilkins (LWW), 1998

Past-President, CPA, 1999 - 2000

Publication, by LWW, of first textbook entitled *Evidence-Based Guide to Therapeutic Physical Agents*, 2002

Designated member, by the Office des Professions du Québec, on the Board of Directors of the Ordre des Ingénieurs Forestiers du Québec (OIFQ), 2008-2010

Publication, by LWW, of second textbook, entitled Therapeutic Electrophysical Agents: Evidence Behind Practice, 2009

Designated member, by the Office des Professions du Québec, on the Comité de Sélection of candidates to become a judge in Quebec court, 2013

Designated member, by the Office des Professions du Québec, on the Comité de Révision of the Ordre des Infirmières et Infirmiers du Québec (OIIQ), 2012 –

Publication, by LWW, of third textbook, entitled Therapeutic Electrophysical Agents: Evidence Behind Practice, 2014

Designated member, by the Office des Professions du Québec, on the Comité de Sélection of candidates to become a judge in Quebec Court, 2013

Member of Comité de Discipline, OPPQ, Quebec Licensing Board, 2016

Associated Editor, Physiotherapy Journal, CPA, 2016

Mentor Education – Nomination by World Confederation of Physical Therapy (WCPT) – SUDA Project in Senegal, 2016 -

### **Invited Speaker**

Annual Congress, Professional Corporation of Physiotherapists of Quebec (PCPQ), Montreal, 1976

Annual Congress, Canadian Podiatric Association, Quebec City, 1976

Annual Congress, Canadian Medical Association, Quebec City, 1977

Joint Congress of the PCPQ and CPA, Quebec City, 1982

Research Seminar, School of Physical and Occupational Therapy, McGill University, Montreal, 1983

Clinical Reading and Presentation Club of Quebec, Quebec City, 1983

Research Seminar, School of Rehabilitation, University of Montreal, Montreal, 1984

Research Seminar, School of Rehabilitation, University of Montreal, Montreal, 1985

Clinical Reading and Presentation Club of Quebec, Quebec City, 1986

Physiotherapy department, Centre Hospitalier St-Augustin, Courville, 1987

Conferences of the Research Center, Montreal Rehabilitation Institute, Montreal, 1988

Jubilee Congress of the Dutch Society of Physiotherapy, The Hague, 1989

Annual Congress of PCPQ, Bromont, 1989

Seminar on Laser Therapy, PCPQ Annual Congress, Montreal, 1990

Pre-congress course of the PCPQ - CPA Joint Congress, Montreal, 1991

A Research retreat: organized by the American Physical Therapy Association, New Hampton, 1991

Institute for Research in Extramural Medicine, Faculty of Medicine, University of Amsterdam, 1992

Second International Congress on Objective Assessment in Rehabilitation Medicine, Montreal, 1993

Conference on Palliative Care, New-Brunswick Extra-Mural Hospital, Edmunston and Fredericton, N.B, 1993

Annual Congress of the Royal Dutch Association of Physiotherapy, The Hague, 1993

OSEP Congress, Quebec City, 1995

Eight International Symposium of the Physical Medicine Research Foundation, Banff ,1995

Joint Conference CPA/OPPQ, Montreal, 1996

Regional Symposia Organized by the Canadian Coordinating Office for the Health Technology Assessment (CCOHTA) and the CPA, Toronto, 1996

International Society for Electrophysical Agents in Physical Therapy (ISEAPT) Meeting, 2009

EPA Ask the Expert Call Series - hosted by Aegis Therapies, 2011

Medwest Speakers Series, Calgary University, Calgary, 2015

### **Invited Chair**

Scientific Chair, 11<sup>th</sup> International Congress of the World Confederation for Physical Therapy, London, 1991

Scientific Chair, Joint Congress of the American and Canadian Associations of Physiotherapy, Toronto, 1994

Scientific Chair, 12<sup>th</sup> Congress of the International Ergonomics Association, Toronto, 1995

Scientific Chair, 14<sup>th</sup> International Congress of the World Confederation for Physical Therapy, Barcelona, 2003

### **Oral Communications**

1. Les effets de la rétroaction électromyographique sur la force d'adduction développée par l'abducteur du premier orteil et sur les paramètres squelettiques associés à l'Hallux Valgus. Congress, Professional Corporation of Physiotherapist of Quebec (PCPQ), Montreal, 1976
2. The function of the Abductor Hallucis. Congress, Canadian Podiatric Association, Quebec City, 1976
3. La prévention des blessures au cours des programmes de conditionnement. Congress, Canadian Medical Association, Quebec City, 1977
4. Nouvelle méthode de renforcement musculaire: l'électrostimulation percutanée. Eight International Congress of the World Confederation of Physical Therapy, Tel Aviv, 1978
5. La réforme des cours en physiothérapie: où allons-nous? Congress of the PCPQ, Chicoutimi, 1980
6. Can motoneurons be fully activated? Nerve and Muscle Mini- Symposium: Motor Control, McMaster University, Hamilton, 1981
7. Muscle contraction studies in Human Dystrophy. A day of Nerve and Muscle Research, McMaster University, Hamilton, 1982
8. L'activité des unités motrices lors d'une contraction musculaire volontaire. Joint Congress of the PCPQ and CPA, Quebec City, 1982
9. A comparison of the contractile properties of two antagonistic muscle groups. Research Seminar, School of Physical and Occupational Therapy, McGill University, Montreal, 1983
10. La douleur et le TENS. Clinical Reading and Presentation Club of Quebec, Quebec City, 1983
11. Propriétés électromécaniques du muscle lors d'épreuves de force et de fatigue isométriques. Research Seminar, School of Rehabilitation, Université de Montréal, Montreal, 1984
12. Fonctions neuromusculaires chez l'adulte dystrophique. Congress, Clinical Research Club of Quebec, Pointe-au-Pic, 1984

13. Existe-t-il des différences entre les propriétés neuromusculaires chez les groupes de fléchisseurs et extenseurs du coude et de la cheville chez l'humain? Research Seminar, School of Rehabilitation, Université de Montréal, Montreal, 1985
14. A comparison of contractile properties in human arm and leg muscles. 18th Annual Congress, Canadian Association of Sports and Science, Quebec City, 1985
15. Rapport du groupe de travail québécois sur les aspects cliniques des affections vertébrales chez les travailleurs: un résumé et son impact sur la physiothérapie. Noon Conference. Physiotherapy Department, Laval University, Quebec City, 1986
16. Le diagnostic et le traitement des affections vertébrales: la position de l'I.R.S.S.T. Clinical Reading and Presentation Club of Quebec, Quebec City, 1986
17. Le rapport de l'IRSST sur les troubles de la colonne vertébrale; son impact sur la profession. Annual Congress of the PCPQ, Trois- Rivières, 1986
18. The effect of muscle tapping on soleus motoneuron excitability." Exchange Quebec-Ontario, with the Department of Physical Medicine: University of Toronto. Toronto, 1986
19. Évaluation de la fonction neuromusculaire et des effets de l'exercice chez l'adulte dystrophique. Symposium "Connaissances actuelles sur la dystrophie myotonique de Steinert au Québec". Department of Physiotherapy, Laval University, Quebec City, 1986
20. La douleur et la personne âgée. Invited presentation by the "Conseil consultatif du personnel clinique." Centre hospitalier St-Augustin, Courville, 1987
21. Les aspects psychosociaux de la douleur vertébrale chronique. Third Canadian Congress of Rehabilitation, Quebec City, 1987
22. Bilateral muscle assessment of adult dystrophic patients does not support the concept of overuse muscle weakness. Joint Congress of the Amer. Acad. Phys. Med. and Amer. Congr. of Rehab. Med., Orlando, USA, 1987
23. Comment mesurer la douleur en clinique? Conferences of the Research Center. Montreal Rehabilitation Institute. Montreal, 1988
24. Evaluation and treatment of Motor Disturbances - Application of Current research. Joint Congress of the American and Canadian Associations of Physiotherapy, Las Vegas, 1988
25. Muscle strengthening in adult muscular dystrophy: Is it harmful and what about the patient's compliance to exercise? Joint Congress of the American and Canadian Associations of Physiotherapy, Las Vegas, 1988

26. Tetanical pain due to percutaneous electrical stimulation in humans: Does it originate from surface or deep nociception? "Sport-Med 89", Sport Medicine Division of the Ontario Medical Association, Toronto, 1989
27. La formation continue au banc des accusés: que le vrai physiothérapeute se lève. Annual Congress of the P.C.P.Q., Bromont, 1989
28. Muscle electrostimulation in Physiotherapy: A critical look at some controversial issues. Jubilee Congress of the Dutch Society of Physiotherapy, The Hague, 1989
29. Courants et radiations électromagnétiques en physiothérapie: un rappel. Continued Education, Centre François-Charon, Quebec City, 1989
30. Précautions, dangers et contre-indications en électrothérapie: travailleurs(es) versus bénéficiaires. Continued Education, Centre François-Charon, Quebec City, 1989
31. Diathermies onde courte et micro-onde: risques pour la santé du travailleur ou de la travailleuse et pour le fœtus. Continued Education, Centre François-Charon, Quebec City, 1989
32. Therapeutical Efficacy of Lasers in Physiotherapy: An update of Human In-vivo Literature. CPA Annual Congress, Charlottetown, Prince-Edward Island, 1990
33. Laser en physiothérapie: Est-ce efficace? Seminar on Laser Therapy, organized by the P.C.P.Q. and Cardon Inc., Montreal, 1990
34. Contractile properties of Adductor Pollicis muscle in relation to its two anatomical planes of adduction. Annual Congress: Amer. Acad. Phys. Med. and Amer. Congr. of Rehab. Med., Phoenix, 1990
35. La douleur clinique: peut-on l'évaluer et si oui, comment? Symposium of the Associations of Physiotherapy and Occupational Therapy Students, Laval University, Quebec City, 1991
36. Recherche au laboratoire d'évaluation de la fonction neuromusculaire humaine: un survol. Research Center, St-François d'Assise Hospital, Quebec City, 1991
37. In vitro versus in vivo therapeutical effects of Lasertherapy in Humans. Pre-congress course of the PCPQ - CPA Joint Congress, Montreal, 1991
38. Pain as a limiting factor to paediatric contractile assessment. PCPQ and CPA Joint Congress, Montreal, 1991
39. The McKenzie Approach: How many clinical trials support its effectiveness? 11th International Congress of the World Confederation for Physical Therapy - WCPT, London, 1991
40. The placebo effect of soft lasers. 11th International Congress of the World Confederation for Physical Therapy - WCPT, London, 1991

41. Assessment of human dystrophic muscles using evoked and volitional electromechanical responses". Muscle Function in Normal and Pathological States: A research retreat, New Hampton, 1991
42. Maux de dos et prévention. Semaine de la santé et de la sécurité au travail, CSST, Québec, 1992
43. Physiotherapy Research in Canada. Institute for Research in Extramural Medicine, Faculty of Medicine, University of Amsterdam, 1992
44. Current and future topics in Physiotherapy Research. Conference at the inaugural nomination of Dr. P.J.M. Helders as the first professor of Physiotherapy" in the Netherlands, Utrecht, 1992
45. Physiotherapy treatment of spinal disorders: Focus on manual therapy and back school. II<sup>nd</sup> International Congress on Objective Assessment in Rehabilitation Medicine, Montreal, 1992
46. Rôle des physiothérapeutes en soins palliatifs. Conference on "Palliative Care",. New Brunswick Extra-Mural Hospital, Edmunston, 1993.
47. The Role of Physiotherapists in Palliative Care. Conference on "Palliative Care", New-Brunswick Extra-Mural Hospital, Fredericton, 1993
48. Protocols to assess sincerity of effort during maximum isometric strength testing: A review". CPA Annual Congress, Halifax 1993
49. Work hardening program for low back pain: The role of Physiotherapy. CPA Annual Congress, Halifax, 1993
50. Efficacité de la thérapie manuelle pour les affections à la colonne vertébrale: revue et critique de la littérature. Annual Congress, PCPQ, Aylmer, 1993
51. Scientific evidence: The basis of physiotherapy. Annual Congress of the Royal Dutch Association of Physiotherapy, The Hague, 1993
52. Scholarly productivity: Profile of Canadian physiotherapy aculty. Joint Congress of the American and Canadian Associations of Physiotherapy. Toronto, 1994
53. Étude longitudinale de la cicatrisation naturelle du ligament croisé antérieur (LCA) du genou suite à une lésion traumatiqu. Seminar, Research Center, Hôpital St-François-d'Assises, Quebec City
54. Functional restoration programs for chronic low-back pain workers and return to work: The bridging role of Ergonomics in Rehabilitation, 12th Congress of the International Ergonomics Association, Toronto, 1994



55. Relation professionnelle entre les physiothérapeutes et les techniciens en réadaptation physique: rappel historique et état actuel de la situation. OSEP Congress, Quebec City, 1995
56. Dosimétrie en thermothérapie. Lunch Conference, Physiotherapy Department , HSFA, Quebec City, 1995
57. Complete Quadriceps Motor unit activation during voluntary effort: How easy is it to achieve and what about limb dominance? 12th International Congress of the World Confederation for Physical Therapy - WCPT, Washington, 1995
58. Anterior cruciate ligament prostheses: Possible intrinsic causes for failure. 12th International Congress of the World Confederation for Physical Therapy - WCPT, Washington, 1995
59. The pros and cons of passive physical therapy modalities for neck disorders. 8th International Symposium of the Physical Medicine Research Foundation, Banff, 1995
60. Case studies in the assessment of physiotherapy interventions: Electrophysical agents: Regional Symposia organized by the Canadian Coordinating Office for the Health Technology Assessment (CCOHTA) and the CPA, Toronto, 1996
61. Mise à jour sur le TENS. Continuing Education of Service de physiothérapie, Centre hospitalier universitaire de Québec (CHUQ). January, Quebec City, 1997
62. Recognizing our differences and identifying partnership opportunities. Organized by the CPA Quebec Branch and OPQ. February, Quebec City and Montreal, 1997
63. Impact du rapport Spitzer portant sur l'entorse cervicale sur la pratique physiothérapique en regard aux accidentés de la route. Annual congress of the OPPQ, Quebec City, 1997
64. Développement de la physiothérapie au Canada: Passé, present et avenir. Department of Physiotherapy, University of Ottawa, Ottawa, 1997
65. Quel est le prix à payer pour obtenir une reconnaissance professionnelle? Department of Physiotherapy, University of Ottawa, Ottawa, 1997
66. L'impact du rapport Spitzer sur la pratique physiothérapique. Teleconference, Continuing Education, CPA, Ottawa, 1997
67. Indications for the therapeutic physical agents. WCTP Congress, Barcelona, 2003

## **Publications**

### **Posters**

1. Are motor units fully activated during strong efforts? Presented at the Annual Congress of the Society for Neuroscience, Los Angeles, Soc. Neurosci. Abstr. 7: 478, 1981

2. Do joint receptors affect motoneurone excitability in man? Presented at the Annual Congress of the Society of Neuroscience, Los Angeles, Soc. Neurosci. Abstr. 7: 409, 1981
3. Comprehensive neuromuscular assessment in myotonic dystrophy. Presented at the 6th National Scientific Workshop of the Muscular Dystrophy Association of Canada, Banff, Alberta. Can. J. Neurol. Sci., 9: 358-359, 1982
4. Muscle function studies in human plantarflexor and dorsiflexor muscles". Presented at the 6th National Scientific Workshop of the Muscular Dystrophy Association of Canada, Banff, Alberta. Can. J. Neurol. Sci., 9: 359, 1982
5. Neuromuscular function in human myotonic dystrophy". Presented at the 5th International Congress of Neuromuscular Diseases, Marseille, 1982
6. Comprehensive neuromuscular assessment of two antagonistic human muscle groups. Presented at the 5th International Congress of Neuromuscular Diseases, Marseille, 1982
7. Twitch properties of human muscle during passive shortening and lengthening. Presented at the Annual Congress of the Society for Neurosciences. Soc. Neurosci. Abstr., 11: 406, 1985
8. Modulation of H-reflex following skin electrical stimulation, Xylocaine and Placebo anesthesia in control subjects". Presented at the Annual Congress of the Society for Neuroscience, Toronto. Soc. Neurosci. Abstr., 14: 1304, 1988
9. Can a super-imposed maximal voluntary contraction be as effective as a complete sensory nerve blockade in reducing pain associated with electrically evoked muscle contractions? Presented at the VI World Congress on Pain, Adelaide, Pain (suppl.) 5: S-77, 1990
10. How surface cleaning of biomaterials improves biocompatibility. 15th Annual Congress of the Canadian Society of Biomaterials, Quebec City, 1994

### **Abstracts**

1. Bélanger AY (1976) Les effets de la rétroaction électromyographique sur la force d'abduction développée par l'abducteur du premier orteil sur les paramètres squelettiques associés à l'hallus valgus. Annual Congress, PCPQ, Quebec City
2. Bélanger AY (1976) The function of the Abductor Hallucis. Annual Congress, Canadian Podiatric Association, Quebec City
3. Bélanger AY (1977) La prévention des blessures au cours des programmes de conditionnement. Annual Congress, Canadian Medical Association, Quebec City

4. Bélanger AY (1978) Nouvelle méthode de renforcement musculaire: l'électrostimulation percutanée. Proceedings of the Eight International Congress of the World Confederation for Physical Therapy, p. 11. Tel Aviv
5. Bélanger AY (1980) La réforme des cours en physiothérapie: où allons-nous? Annual Congress, PCPQ, Chicoutimi
6. Bélanger AY, McComas AJ (1981) L'activité des unités motrices lors d'une contraction maximale volontaire. Physioth Can, 33: 180
7. Bélanger AY, McComas AJ (1981) Are Motor units fully activated during strong effort? Soc Neurosci Abstr, 7: 478
8. Robinson K, McComas AJ, Bélanger AY (1981) Do joint receptors affect motoneuron excitability in man? Soc. Neurosci Abstr, 7: 409
9. Bélanger AY, McComas AJ (1982) Comprehensive neuromuscular assessment in myotonic dystrophy. Can J Neurol Sci, 9: 358-359
10. Bélanger AY, Quinlan J (1982) Muscle function studies in human plantarflexor and dorsiflexor muscles. Can J Neurol Sci, 9: 359
11. Bélanger AY, McComas AJ (1982) Neuromuscular function in human myotonic dystrophy. Fifth International Congress of Neuromuscular Diseases. Abstracts of Free Communications, MO. 27, Marseille
12. Bélanger AY, McComas AJ (1982) Comprehensive neuromuscular assessment of two antagonistic human muscle group. Fifth International Congress of Neuromuscular Diseases. Abstracts of Free Communications, TH 58. Marseille
13. Elder G.B.C, Bélanger AY, McComas AJ (1982) Histochemical and physiological changes in human skeletal muscle during postnatal development. Fifth International Congress of Neuromuscular Diseases. Abstracts of Free Communications, No: 40.6. Marseille
14. Bélanger AY, McComas AJ (1984) Fonction neuromusculaire chez l'adulte dystrophique. Union Médicale du Canada, 113: 696
15. Bélanger AY, McComas AJ (1985) Neuromuscular function in myotonic and limb girdle muscular dystrophy. Physioth Can, 37 (Suppl.): 6
16. Gravel D, Bélanger AY, Richards CL, Filion M. (1985) Twitch properties of human muscle during passive shortening and lengthening. Soc Neurosci Abstr, 11: 406
17. Bélanger AY, McComas AJ (1985) A comparison of contractile properties in human arm and leg muscles. J Can Sci Sports: 10; 4

18. Noël, G, Bélanger AY (1986) Force tétanique, intensité de stimulation et douleur: une comparaison entre le Multiflex, le Grass S-88 et le Respond II. Annual Congress, PCPQ, Trois-Rivières
19. Bélanger AY (1986).Le rapport de l'I.R.S.S.T. sur les troubles de la colonne vertébrale; son impact sur la profession. Annual Congress, PCPQ, Trois-Rivières
20. Bélanger AY and Group (1986).Grilles thérapeutiques des affections vertébrales chez les travailleurs: conclusions et recommandations du groupe de travail I.R.S.S.T. Union médicale du Canada, 115: 588
21. Bélanger AY and Group (1987) Les aspects psychosociaux de la douleur vertébrale chronique. Third Canadian Congress of Rehabilitation. Quebec City
22. Bélanger AY, Noël G (1987) Bilateral muscle assessment of adult dystrophic patients does not support the concept of overuse muscle weakness. Arch Phys Med Reha., 68: 641-42
23. Bélanger AY, Noël G (1988) Muscle strengthening in adult muscular dystrophy: Is it harmful and what about the patient's compliance to exercise? Phys Ther, 68 : 846
24. Richards CL, Malouin F, Bélanger AY (1988) Evaluation and treatment of motor disturbances - Application of current research. Phys. Ther 68: 774
25. Bélanger AY, Arsenault AB, Durand MA, Fortin L (1988) Modulation of H-reflex following skin electrical stimulation, Xylocaine and placebo anesthesia in control subject. Soc Neurosci Abstr, 14: 1242
26. Bélanger AY, Allen ME, Chapman AE (1989) Tetanical pain due to percutaneous electrical stimulation in human: Does it originate from surface or deep nociception? Sport-Med 89, Sport Medicine Division of the Ontario Medical Association, Toronto, 1989
27. Bélanger AY (1989) La formation continue au banc des accusés: que le vrai physiothérapeute se lève. Annual Congress, P.C.P.Q., Bromont
28. Bélanger AY (1989) Muscle Electrostimulation in Physiotherapy: A critical look at some controversial issues. Proceedings of Jubilee Congress of the Dutch Society of Physiotherapy, The Hague, p. 34
29. Bélanger AY, Allen ME, Chapman AE (1990).Can a superimposed maximal voluntary contraction be as effective as a complete sensory nerve blockade in reducing pain associated with electrically evoked muscle contractions? Pain Suppl (5): S-77
30. Arsenault AB, De Serres S, Bélanger AY, Kemp F (1990) L'effet de l'anesthésie des afférences cutanées, du changement de la température musculaire sur le réflexe de Hoffman. 58th Annual Congress of the ACFAS, Quebec City

31. Bélanger AY (1990) Therapeutical efficacy of lasers in physiotherapy: An update of Human in-vivo literature. Physioth Can.42 (3, Suppl.): 18
32. Bélanger AY, Noël G (1990) Contractile properties of Adductor pollicis muscle in relation to its two anatomical planes of adduction. Arch Phys Med Rehab, 71: 759
33. Bélanger AY (1991) In vitro versus in vivo therapeutical effects of lasertherapy in humans. Proceedings of the Pre-Congress course: Biophysical Alternatives to Healing of soft tissue injuries. Joint Congress of the PCPQ and CPA, Montreal
34. Bélanger AY (1991) Pain as a limiting factor to paediatric contractile assessment. Physioth Can, 43 (2; Suppl.): 12
35. Bélanger AY, Després MC, Goulet H, Trottier F (1991) The McKenzie approach: How many clinical trials support its effectiveness? 11th International Congress of the World Confederation for Physical Therapy. London
36. Bélanger AY (1991) The placebo effect of soft lasers. 11th International Congress of the World Confederation for Physical Therapy. London
37. Bélanger AY (1991) Assessment of human dystrophic muscles using evoked and volitional electromechanical responses. Muscle function in normal and pathological states: A research retreat. New Hampton
38. Vidovsky T, Roy R, Bélanger AY, Guidoin R (1992) Nouvelle méthode d'étude in vitro de la réponse inflammatoire générée par les biomatériaux, Scientific Day, Department of Experimental Surgery, Laval University, Ste-Foy
39. Vidovsky, T, Roy R, Marois Y, Bélanger AY, Guidoin R (1992) Nouvelle méthode d'étude in vitro de la réponse inflammatoire générée par les biomatériaux, 13th Annual Conference, Canadian Biomaterial Society, Kingston
40. Bélanger AY (1992) Physiotherapy treatment in spinal disorders: Focus on manual therapy and back school. Recueil des résumés: 2nd International Congress on Objective Assessment in Rehabilitation Medicine; 92, Montreal
41. Bélange AY, Laprade N (1993) Protocols to assess sincerity of effort during maximum isometric strength testing: A review. Physioth Can, Abstracts of Scientific Papers, p. 6
42. Bélanger AY, Laprade N (1993) Work hardening program for low back pain: The role of Physiotherapy. Physioth, Can, Abstracts of Scientific Papers, p. 9
43. Bélanger AY (1993) Efficacité de la thérapie manuelle pour les affections à la colonne vertébrale: revue et critique de la littérature. Annual Congress of PCPQ, Aylmer

44. Poddevin N, Cronier B, Marois Y, King MW, Bélanger AY, Guidoin R (1993) Analyses rétrospectives de prothèses du ligament croisé antérieur excisées après leur échec. Scientific day, Hôpital Saint-François d'Assise, Quebec City
45. Bélanger AY (1993) Scientific evidence: The basis of physiotherapy. Annual Congress of the Royal Dutch Association of Physiotherapy, Program Abstract: p. 48-49
46. Bélanger AY, Girard J, Laprade N (1994) Scholarly productivity: Profile of Canadian physiotherapy faculty. Joint Congress of the American and Canadian Physiotherapy Associations, Physioth Can, 46(2, Suppl): 78
47. Poddevin N, Cronier B, Marois Y, Delagoutte JP, Jaeger JH, Bélanger AY, King MW, Guidoin R (1994) Prothèses du ligament croisé antérieur: étiologie de 89 échecs. 15th Annual Congress of the Canadian Society of Biomaterials, Quebec City
48. Bélanger AY (1994) Functional restoration programs for chronic low-back pain workers and return to work: The bridging role of Ergonomics in Rehabilitation. Proceedings of the 12th Congress of the International Ergonomics Association: Vol. 3: 88-90, Toronto
49. Guidoin R, Bélanger AY, Poddevin N, Marois Y, King MW (1995) Anterior cruciate ligament prostheses: Possible intrinsic causes for failure. Proceedings of the WCPT Congress, p. 922
50. Bélanger AY, Poulin M, Godin R, Houde (1995) Complete quadriceps motor unit activation during voluntary effort: How easy is it to achieve and what about limb dominance? Proceedings of the WCPT Congress, p. 826
51. Bélanger AY (1996) Case studies in the Assessment of Physiotherapy interventions: Electrophysical Agents. Symposium "Towards Evidence-based Practice in Physiotherapy". Regional Symposium CCOHTA/CPA
52. Bélanger AY (1997) Impact du rapport Spitzer portant sur l'entorse cervicale sur la pratique physiothérapique en regard aux accidentés de la route. Congrès de l'OPQ, Recueil des abrégés.
53. Bélanger AY (2003) Indications for Therapeutic Physical Agents. 14<sup>th</sup> WCPT Congress, Barcelona

#### **Articles with Peer Review**

1. Bélanger AY (1975) La cryothérapie et le milieu sportif. Athletica, 2(2): 10-11
2. Bélanger AY, Chapman AE (1977) Function and training of the abductor hallucis muscle in cases of mild Hallux Valgus. Physioth Can, 29(4): 205-210

3. Chapman A, Bélanger AY (1977) Electromyographic methods of evaluating strength training. Electromyogr Clin Neurophysiol, 17: 265-28.
4. Bélanger AY, McComas AJ (1981) Extent of motor unit activation during effort. J Appl Physiol Respirat Environ Exercise Physiol., 51(5): 1131-1135
5. Sale D., Quinlan J, Marsh E, McComas AJ, Bélanger AY (1982) Influence of joint position on ankle plantarflexion in human. J Appl Physiol Respirat Environ Exercise Physiol., 52(6): 1636-1642
6. Robinson K, McComas AJ, Bélanger AY (1982) Control of soleus motoneuron excitability during muscle stretch in man. J Neurol Neurosurg Psychiatr, 45: 699-704
7. Bélanger AY, McComas AJ, Elder GBC (1983) Physiological properties of two antagonistic human muscle groups. Eu. J. Appl Physiol, 51: 381-393
8. Bélanger AY, McComas AJ (1983) Contractile properties of muscle in myotonic dystrophy. J Neurol Neurosurg Psychiatr, 46: 625-631
9. Bélanger AY, Noël G, Bilodeau L, Boutin A, Gingras C, Guillemette C. (1983) L'utilisation de la table de Berger pour déterminer le 1 RM et le 10 RM des muscles extenseurs du genou. Physioth Ca., 36: 11-16
10. Bélanger AY (1985) Physiological evidence for an endogenous opiate related pain modulating system and its relevance to TENS: A review. Physioth Can, 37: 163-168
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### **Continuing Education Courses**

Currently offering multiple continuing courses, related the field of therapeutic electrophysical agents, in the province of Quebec and in the USA.

### **Website**

Launching of website in 2013:

[alainyvanbelanger.com](http://alainyvanbelanger.com)

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