

CURRICULUM VITAE

Updated 2022

Name: Erin Lynn Boynton

EDUCATION:

1978-1981	Bachelor of Physical Education, Mc Master University, Hamilton, Ontario, Canada
1981-1985	Medical Doctor, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada.

PROFESSIONAL TRAINING:

1985-1986	Straight Surgical Internship, Toronto General Hospital, University of Toronto
1986-1991	University of Toronto, Orthopaedic Training Program
July-Dec 1991	St. Michael's Hospital, University of Toronto, Upper Extremity Fellowship
Jan1992-July1993	UCLA Orthopaedic Department, Sports Medicine and Shoulder Fellowship

ACADEMIC APPOINTMENTS:

2008-2011	Associate Member, Rehabilitation Science, Faculty of Medicine, University of Toronto
1993-2006	Assistant Professor, Department of Surgery, University of Toronto
2008-2015	Assistant Professor, Department of Physical Therapy, University of Toronto

HOSPITAL APPOINTMENTS:

1993-1998	Consultant Staff Women's College Hospital, Toronto, Ontario, Canada
1993-2006	Consultant Staff Mount Sinai Hospital, Toronto, Ontario, Canada
2008-2009	Orthopaedic Surgeon Excelsior Orthopaedic Surgical Center, Buffalo, New York, United States of America

OTHER APPOINTMENTS:

1999-2004	Consultant Orthopaedic Surgeon Toronto Blue Jays-Major League Baseball
2002-Present	Medical Physician for the WTA Tour Rogers Toronto, Canada.
2004- 2016	Medical Consultant Toronto Blue Jays Draft.
2006- Present	Consultant Physician Seiden Health Management
2006-Present	Consultant Physician Viewpoint Medical Assessments
2004-2006	Chief Orthopaedic Surgeon Toronto Blue Jays-Major League Baseball
2004-2006	Orthopaedic Consultant to the Toronto Argonauts-Canadian Football League
2005-2006	Chief Orthopaedic Surgeon Toronto Maple Leafs-National Hockey League
2005-2006	Chief Orthopaedic Consultant Toronto Marlies Hockey –American Hockey League
2008-2009	Orthopaedic Consultant Institute Sports Medicine.
2008-2009	Director Wellness Center Toronto Lawn Tennis Club

2008-July 2016 Member of the Board of Directors, Chair of Research Committee, Canadian Orthopaedic Foundation

April 2020-Present Chief Medical Officer for Precision Movement.

HONOURS AND AWARDS RECEIVED

A.Y Jackson Secondary School Athlete of the Year: 1977

Miriam Peters Book Prize for Academic and Leadership Skills: 1977

McMaster University Scholarship: First Standing in Class 1979-1981

McMaster University Senate Scholarship: 1979

McMaster University Senate Scholarship: 1980

McMaster University Varsity Tennis Team Most Valuable Contributor Award: 1980

John Copp Bursary Medical School Award: 1982 All around academic and athletic leadership, University of Toronto.

R.I. Harris Award: Most Outstanding Graduating Orthopaedic Resident, University of Toronto 1991

Wightman-Berris Academy teaching award nomination for 2002

Samson Award in recognition of research excellence by the Canadian Orthopaedic Association entitled "The Role of the Macrophage and Polyethylene Surface Chemistry in Total Joint Replacement." 2002

Canadian Orthopaedic Foundation, Board of Directors Award of Distinction: For Outstanding Leadership and Service, 2016.

Irving Glick Award of Excellence: Voted by the WTA tour trainers as the most outstanding physician on the WTA world tour 2017.

MEDICAL/SCIENTIFIC ORGANIZATIONS-MEMBERSHIPS:

Ontario Medical Association

Canadian Medical Protective Association

Canadian Orthopaedic Association

College of Physicians and Surgeons of Ontario

Canadian Orthopaedic Foundation

Fellow Royal College of Physicians and Surgeons of Canada Specialty
Orthopedics

American Board of Orthopaedic Surgery (July 1999-Dec 2010)

Society for Tennis Medicine and Science

Medico-Legal Society of Toronto

COMMITTEE INVOLVEMENT:

Department of Surgery:

Curriculum Committee for Resident Teaching, Orthopaedic Division,
Member 1989-1990

Orthopaedic Resident's Association, Orthopaedic Division, President
1990-1991

Resident Stress Management, Orthopaedic Division, Consultant 1993-
2006

Bioethics in Surgery, Member, 1994-2006

Search Committee for Chair of Orthopaedic Surgery, 1995-August 2019
Canadian Orthopaedic Research Society Executive Committee:

Executive Committee Member 2002-2003

Secretary 2003-2004

Program Director 2005-2006

President 2006-2007

Past President 2007-2008.

PATENTS:

Boynton EL, Title: Orthopaedic Support Garment. U.S. Patent No. 8,887,315, Issued November 18, 2014.

OTHER COURSES:

Nov 2003	Dr. Charles A. Rockwood, San Antonio, Texas, USA Surgical Techniques in Upper Extremities
Sept 2004	McMaster University Health Sciences Continuing Education Program, Hamilton, Ontario, Canada Contemporary Electro-acupuncture for Lower Extremity Sports Injuries
Feb 2005	The Acupuncture Foundation of Canada Institute, Toronto, Ontario, Canada Certification in Level 1, Part 1 of Core Curriculum on Acupuncture
Dec 2007	Advanced Needling Techniques- McMaster University Health Sciences Continuing Education Program, Hamilton, Ontario, Canada

PUBLICATIONS:

Peer Reviewed – Journal Publications (PA – principal author; SRI – senior responsible investigator; CPA – co-principal author; C – collaborator)

Published Papers

1. **Boynton EL, Paley D, Gross AE, Silverstein E, Goldberg M**: False aneurysm in a charcot hip: Report of a case. JBJS 1986: 68 A: pp 462-464. **PA**
2. **McDermott AGP, Finkelstein JA, Farine I, Boynton EL, MacIntosh DL, Gross AE**: Distal femoral varus osteotomy for valgus deformity of the knee. Journal of Bone and Joint Surgery 1988: 70-A: pp 110-116. **C**
3. **Ogilvie-Harris D, Boynton EL**: Arthroscopic acromioplasty: Extravasation of fluid into the deltoid muscle. Arthroscopy 1990: 6 (1): pp 52-54. **SRI**

4. **Boynton EL, Waddell JP, Morton J, Gardiner GW:** Aseptic loosening in total hip implants: The role of polyethylene wear debris. *Canadian Journal of Surgery* 1991; 34: pp 599-606. **PA**
5. **Liu SH, Boynton EL:** Case Report: Posterior superior impingement of the rotator cuff on the glenoid rim as a cause of shoulder pain in the overhead athlete. *Arthroscopy* 1993;96: pp 697-699. **PA**
6. **Boynton EL, Henry M, Morton, J, Waddell JP:** The inflammatory response to particulate wear debris in total hip arthroplasty. *Canadian Journal of Surgery* 1995; 38: pp 507-515. **PA**
7. **Sandhu JS, Boynton EL, Hozumi N:** The use of SCID mice in biotechnology and as a model for human disease. *Critical Review in Biotechnology* 1996: 16 (1): 00 95-118. **C**
8. **Boynton EL, Hozumi N, Gross AE, Aubin J, Sandhu J:** Human osteoblasts survive and deposit new bone when human bone is implanted in SCID mouse. *Bone* 1996: 18 (4): pp 321-326. **C**
9. **Sandhu JS, Clark BR, Boynton EL, Keating A, Hozumi N:** Human hematopoiesis in SCID mice implanted with human adult cancellous bone. *Blood* 1996: 88 (6): pp 1973-1982. **C**
10. **Jain R, Brown M, Boynton EL:** Not another diabetic foot infection – A case report. *Canadian Journal of Plastic Surgery* 1996: 4 (4): pp 205-208. **CPA**
11. **Whiteside C, Dessureault S, Dickstein J, Tibbles LA, Torrance S, Boynton EL, Seeman M, Siminovitch K, Steward Daily:** Woman in biomedical research: Address the challenges. *Clinical and Investigative Medicine* 1997: 20 (4): pp 268-272. **C**
12. **Sandhu J, Waddell JE, Henry M, Boynton EL:** The role of T-cells in polyethylene particulate induced inflammation. *Journal of Rheumatologist* 1998: 25: pp 1794-1799. **C**
13. **Van Brenk B, Richards MB, Mackay MB, Boynton EL:** A biomechanical assessment of ligaments preventing dorsoradial subluxation of the trapeziometacarpal joint. *Journal of Hand Surgery* 1998: 23A: pp 607-611. **PA**
14. **Voronov I, Santerre JP, Binek A, Calthan JW, Sandhu JS, Boynton EL:** Macrophage phagocytosis of polyethylene particulate in vitro. *Journal of Biomaterials Research* 1998: pp 40-51. **PA**

15. **Sandhu JS, Gorczynski R, Waddell J, Nguyen M, Squires J, Waddell JP, Boynton EL, Hozumi N:** Effect of IL-6 secreted by engineered human stromal cells on osteoclasts in human bone. *Bone* 1999; 23 (3): pp 217-227. **C**
16. **Ferguson PC, Boynton EL, Wunder JS, Hil RP, O'Sullivan B, Sandhu JS, Bell RS:** Intradermal Injection of Autologous Dermal Fibroblasts Improves Wound Healing in Irradiated Skin. *Journal of Surgical Research* 85 1999: 1999.5664: pp 331-338. **CPA**
17. **Boynton EL, Rae S, Sandhu J, Labow RS, Santerre JP:** The effect of polyethylene particle surface chemistry on human monocytes-macrophage function in vitro. *Journal of Biomedical Materials Research* 2000: 52 (2): pp 239-245. **PA**
18. **Lee AW, Santerre JP, Boynton EL:** Influence of oxidation process on the chemistry of ultra high molecular weight polyethylene (UHMWPE): Particulates and the implications towards cell/particle interactions. *Biomaterials* 2000: 21 (8): pp 851-861. **CPA**
19. **Xing S, Rae S, Santerre JP, Boynton EL:** The role of the macrophage in total joint replacement failure. *Canadian Journal of Surgery* 2000: 43 (3): pp 173-179. **PA**
20. **Xing S, Waddell JE, Boynton EL:** Changes in Macrophage Morphology and Viability following exposure to polyethylene particulate in Vitro. *Journal of Microscopy and Techniques* 2002: pp 523-529. **PA**
21. **Xing S, Santerre JP, Labow RS, Boynton EL:** The effect of phagocytosis of polyethylene on mature human monocytes-derived macrophage viability. *Journal of Biomedical Materials Research*. 2002. **PA**
22. **Xing S, Santerre JP, Labow RS, Boynton EL:** Differential response to chemically altered polyethylene by activated human monocytes-derived mature macrophages. *Journal of Biomaterials* 2002: 23: pp 3595-3602. **PA**
23. **Tavazzani F, Xing S, Waddell JE, Smith Daily, Boynton EL:** In Vitro Interaction Between Silicone Gel and Human Monocyte-Macrophages. *The Journal of Biomedical Research* 2005: 72 A (2): pp 167-167. **SRI**
24. **Xing S, Waddell JE, Boynton EL:** Changes in Macrophage Morphology and Viability following exposure to polyethylene particulate in Vitro. *Journal of Microscopy and Techniques* 2002: pp 523-529. **PA**
25. **Xing S, Santerre JP, Labow RS:** The effect of phagocytosis and polyethylene on mature human monocyte-derived macrophage viability. *Journal of Biomedical Materials Research*. 2002. **PA**

- 26.Xing S, Santerre JP, Labow RS, Boynton EL:** Differential Response of chemically altered polyethylene by activated human monocyte-derived mature macrophages. *Journal of Biomaterials* 2002; 23: pp 3595-3602. **PA**
- 27.Tavazzani F, Xing S, Waddell JE, Smith D, Boynton EL:** In Vitro Interaction Between Silicone Gel and Human Monocyte-Macrophages. *The Journal of Biomedical Research* 2005; 72A(2): pp 161-7. **SRI**
- 28.Waddell J, Pritzker KP, Boynton EL:** Increased cytokine secretion in patients with failed implants compared with patients with primary implants. *Clinical Orthopaedics and Related Research* 2005; 434: pp 170-6. **SRI**
- 29.White LM, Powell TI, Tomlinson, G, Boynton EL:** Increase Subcortical Patellar T2 Waited Signal Intensity – A Subacute Finding After Knee Injury. *Radiology* 2005; 236(3): pp 952-7. **C**
- 30.Kim SY, Boynton EL, Ravichandiran K, Fung L, Agur AM:** Three-dimensional study of the musculotendinous architecture of supraspinatus and its functional correlations. *Clinical Anatomy*. 2007 Aug; 20(6): 648-55. **C**
- 31.Mullaney PJ, Bleankney R, Tuchscherer P, Boynton EL, White L:** Posterior dislocation of the Long Head of the Biceps Tendon: Case Report and review of the literature. *Skel Radiology*. 2007 Aug;36(8):779-83. **C**
- 32.Probyn LJ, White LM, Salonen D, Tomlinson G, Boynton EL:** Direct MR Arthrographic Assessment of Recurrent Symptoms Post Shoulder Instability Repair: Correlation With Second Look Surgical Evaluation (in 40 Patients). *Radiology*. 2007 Dec;245(3): 814-23. **CPA**
- 33.Maman, E, Morag, G, Safir O, Benifla M. Mozes G, Boynton EL:** The anterior trunk of the axillary nerve: Surgical anatomy and guidelines. A fresh, young cadavers study. *J Ortho Research* June 2008. **SRI**
- 34.Kim, Soo., Bleankney, R.R., Rindlisbacher, T., Boynton, E.L., Richardson, D., Agur, A.;** In vivo ultrasonographic investigation of the musculotendinous architecture of supraspinatus in subjects with rotator cuff tears: A pilot study. *Clinical Anatomy* 21: 809-844 (2008). **C**
- 35.Maman, E, Harris, C, White, L, Tomlinson G, Shashank M, Boynton E.** Natural History of Rotator Cuff Tears: Longitudinal MRI and Clinical Follow-up of Non-operated Tears. *JBJS(Am)*. 2009;91:1898-1906. **SRI**
- 36.Kim s, Bleakney R, BoyntonE, Ravichandiran K, Rindlisbacher T, McKee N, Agur A:** Ultrasonographic investigation of the static and dynamic in vivo musculotendinous architecture of suprapinatus. *Clinical Anatomy*. 2001; 23: 48-55. **C**

Non-Peer Reviewed – Journal Publications

1. **Boynton EL:** Unicompartmental knee replacement. University of Toronto Medical Journal 1982: LX #2: pp 30-34. **PA**
2. **Boynton EL:** Handicaps in young adults: Disadvantaged patients and their families. The Role and Responsibility of Physicians 1983: pp 203-212. **PA**
3. **Prebeg M, Scappaticci M, Boynton EL:** Shoulder injuries: Part 1: Normal Shoulder Anatomy and Diagnosis of Common Conditions. Urban Fitness 2005: 1, issue 5: pp 21-21. **CPA**
4. **Prebeg M, Scappaticci M, Boynton EL:** Shoulder Injuries: Part 2: Surgical and Non-Surgical Management of Shoulder Injuries. Urban Fitness 2005: 1, issue 6: pp 18-19. **CPA**

Books/Chapters in Books/Proceedings:

Published:

1. **Jason WJ, Boynton EL, Finerman GAM:** Knee injuries in the mature athlete. In: Sports and Exercise in Midlife (Gordon SL, Gonzalez-Mestre X, Garrett Jr WB, eds). American Academy of Orthopaedic Surgery 1994: pp 449-514. **C**
2. **Miniaci A, Boynton EL:** Clinical assessment, imaging and classification In: OKU Shoulder and Elbow AAOS (Norris TR, ed). American Academy of Orthopaedic Surgeons 1998: pp59-64. **PA**
3. **Boynton EL:** Muscle Moments, published by Eric Wong, Mixed Martial Media, 2020

Peer Reviewed Papers Read at Scientific Meetings

1. **Kostuik JP, Boynton EL:** Anterior cruciate ligament reconstruction. American Orthopaedic Association, Las Vegas, Nevada, USA, July 1985.
2. **Boynton EL, Morton J, Waddell JP:** Aseptic Loosening in total hip implants. SICOT Meeting, Montreal, Quebec, Canada, July 1990.
3. **Boynton EL, Morton J, Waddell JP:** Aseptic Loosening in total hip implants. Canadian Orthopaedic Association, Vancouver, British Columbia, Canada, July 1990.
4. **Boynton EL, Morton J, Gardiner G, Waddell JP:** Mechanism of loosening in acetabular screw rings. American Orthopaedic Association, New Orleans, Louisiana, USA, July 1990.

5. **Boynton EL, Richards RR, Wright CS:** A cineradiographic analysis of the CMC joint following tendon interposition arthroplasty with ligament reconstruction. American Academy of Orthopaedic Surgery, Anaheim, California, USA, July 1991.
6. **Boynton EL, Richards RR, Wright CS:** A cineradiographic analysis of the CMC joint following tendon interposition arthroplasty with ligament reconstruction. Canadian Orthopaedic Association, Calgary, Alberta, Canada, July 1991.
7. **Boynton EL, Morgan J, Waddell JP:** Aseptic loosening in total hip implants. American Academy of Orthopaedic Surgery, Anaheim, California, USA, July 1991.
8. **Boynton EL, Waddell JP, Morton J, Henry M, Fronasier VL:** The immunology of the bone implant interface. Canadian Orthopaedic Research Society, Toronto, Ontario, Canada, July 1992.
9. **Boynton EL, Waddell JP, Morton J, Henry M:** The immunologic response to wear debris. American Academy of Orthopaedic Surgery Hip Society, Coronado, California, USA, 6 June 1993.
10. **Boynton EL, Waddell JP, Morton J, Henry M:** The immunologic response to wear debris. American Academy of Orthopaedic Surgery Hip Society, New Orleans, Louisiana, USA, 24 February 1994.
11. **Boynton EL:** In vitro testing of particulate debris. Biotech Regulatory, Montreal, Quebec, Canada, 6 October 1994.
12. **Voronov I, Nathens AB, Santerre JP, Boynton EL:** Interactions of macrophages with polyethylene particulate. Canadian Biomaterials Society, Ottawa, Ontario, Canada 20 May 1995.
13. **Boynton EL, Kubo JM, Shapiro MS:** The biomechanics of the Bankart repair. Canadian Orthopaedic Research Society, Halifax, Nova Scotia, Canada, 3 June 1995.
14. **Van Der Brink B, Brooks P, Richards RR, Boynton EL:** The biomechanics of the radial collateral ligament and its role in CMC joint stability. Canadian Orthopaedic Research Society, Halifax, Nova Scotia, Canada, 3 June 1995.
15. **Boynton EL, Sandhu J, Hozumi N, Gross AE:** The growth and differentiation of human bone in the SCID mouse. Canadian Orthopaedic Research Society, Halifax, Nova Scotia, Canada 3 June 1995.

- 16. Boynton EL:** Human osteoblast survive and deposit new bone when viable human bone is implanted in the SCID mouse. American Academy of Orthopaedics, Atlanta, Georgia, USA, 22 February 1996.
- 17. Semple J, Boynton EL, Tavazzani F:** Fatigue factors and particle induced inflammation around saline filled implants. 42nd Annual Plastic Surgery Research Council Meeting, Galveston, Texas, USA, 27 February 1997.
- 18. Sandhu J, Waddell J, Santerre P, Boynton EL:** Phagocytosis of polyethylene particles by human bone marrow cells. 17th Annual Conference, Canadian Biomaterial Society, Montreal, Quebec, Canada, 17 May 1997.
- 19. Lee AW, Santerre JP, Boynton EL, Callahan J:** Detection of Degradation Products from UHMWPE Following Oxidation and Enzyme-Induced Hydrolysis. Society of Biomaterials, San Diego, California, USA, 22 April 1998.
- 20. Sandhu J, Rae S, Addell JE, Santerre P, Callahan J, Boynton EL:** Human macrophage particulate polyethylene interaction in vitro. Canadian Orthopaedic Research Society 32nd Annual Meeting, Ottawa, Ontario, Canada, 20 June 1998.
- 21. Boynton EL, Sandhu J:** A method of immunohistochemical staining for inflammatory cytokines in human bone. Canadian Orthopaedic Research Society 32nd Annual Meeting, Ottawa, Ontario, Canada June 20, 1998.
- 23. Ferguson PC, Bell RS, Wander JS, Boynton EL, Sandhu J:** Subcutaneous irradiated skin. Canadian Orthopaedic Research Society 32nd Annual Meeting, Ottawa, Ontario, Canada, 20 June 1998.
- 24. Boynton EL:** Local inflammation after total joint arthroplasty. Cellular Basis, Toronto, Ontario, Canada, 8 February 2000.
- 25. Tavazzani F, Waddel JE, Smith D, Boynton EL:** In vitro model of human monocytes and silicone gel interaction. Sixth World Biomaterials Congress, Hawaii, USA, 15 May 2000.
- 26. Xing S, Labow RS, Santerre P, Boynton EL:** The effect of chemically altered PE on human macrophage function. Sixth World Biomaterials Congress, Hawaii, USA, 15 May 2000.
- 27. Tavazzani F, Waddel JE, Smith D, Boynton EL:** In vitro model of human monocytes and silicone gel interaction. Sixth World Biomaterials Congress, Hawaii, USA, December 2000.

- 28. Xing S, Labow RS, Santerre P, Boynton EL:** The effect of chemically altered PE on human macrophage function. Sixth World Biomaterials Congress, Hawaii, USA, December 2000.
- 29. Waddell JE, Pritzker KP, Boynton EL:** A Comparison of the Cytokine Levels of Failed Total Hip Patients to Normal Donors. Society for Biomaterials, 27th Annual Meeting Transactions, St. Paul, Minnesota, USA, 25 April 2001.
- 30. Waddell JE, Pritzker KP, Boynton EL:** A Comparison of the Cytokine Levels of Failed Total Hip Patients to Normal Donors. Canadian Orthopaedic Research Society, 35th Annual Meeting, London, Ontario, Canada, 1 June 2001.
- 31. Xing S, Boynton EL, Santerre P:** Human Macrophage Cytokine Secretion, Stimulated by Wear and Non-Wear Generated UHMWPE Particles. Canadian Orthopaedic Research Society, 35th Annual Meeting, London, Ontario, Canada, 1 June 2001.
- 32. Boynton EL, Moderator:** SPINE and JOINT sessions. Canadian Orthopaedic Research Society, 35th Annual General Meeting, London, Ontario, Canada, 1 June 2001.
- 33. Waddell JE, Pritzker K, Boynton EL:** Cytokine Levels of Failed Total Hip Implant Patients Versus Non-Implant Controls. Canadian Biomaterials Society, 21st Annual Conference, Halifax, Nova Scotia, Canada, 7 June 2001.
- 34. Xing S, Boynton EL, Santerre P:** Human Macrophage Cytokine Secretion, Stimulated by Wear and Non-Wear Generated UHMWPE Particles. Canadian Biomaterials Society, 21st Annual Conference, Halifax, Nova Scotia, Canada, 7 June 2001.
- 34. Waddell J, Pritzker K, Boynton EL:** Inflammatory Cytokine Response to Polyethylene Particles in Two Patient Populations. Orthopaedic Research Society, Dallas, Texas, USA, 14 February 2002.
- 35. Boynton EL, Tavazzani F:** Osteoclast Markers Accumulate on Human Peripheral Blood Leukocytes Incubated in the Presence of Polyethylene Particles. American Academy of Orthopaedic Surgeons, Dallas, Texas, USA, 14 February 2002.
- 36. Waddell JP, Pritzker KP, Boynton EL:** The Use of Cytokines as a Predictive Factor for Elevated Inflammatory Responses. Society for Biomaterials, 28th Annual Meeting, Tampa, Florida, USA, 24 April 2002.

- 37. Boynton EL, Kalidjian AA, Taubman MA, Matsuyama T:** “Immunochemical Analysis of Revision Membranes from Revision Surgery.” (Scientific Program) Canadian Orthopaedic Association, 57th Annual Meeting, Victoria, British Columbia, Canada, 1 June 2002.
- 38. Boynton EL, Waddell J, Pritzker K:** “Inflammatory Cytokines: A possible Diagnostic Marker for Amplified inflammatory Response.” (Scientific Program) Canadian Orthopaedic Association, 57th Annual Meeting, Victoria, British Columbia, Canada, 1 June 2002.
- 39. Boynton EL:** Canadian Orthopaedic Association, Winnipeg, Manitoba, Canada, 3-5 October 2003. Presentation of Samson Award, The Role of the Macrophage and Polyethylene Surface Chemistry in Total Joint Replacement.
- 40. Boynton EL:** COA/CORS Combined Sessions, Session 1A: Arthroplasty & Spine – Moderator with S. MacDonald – Canadian Orthopaedic Association, 2004,15.
- 41. Boynton EL:** COA/CORS Combined Sessions, Session 2A: Arthroplasty Combined – Hip & Knee – Moderator with R. Richards 2005,17-18.
- 42. Boynton EL,** CORS Scientific Session 6: Bone/Ligament/Tendon – Moderator with K. Hildebrand 2006, 29.
- 43. Boynton EL,** COA Speciality Day – Sports Medicine – Moderator 2006
- 44. Kim S, Ravichandiran K, Fung L, Agur AM, Boynton EL:** “A Three-Dimensional Study of the Musculotendinous Architecture of Supraspinatus” Israeli Sports Medicine Society Meeting, Tel Aviv, June 12, 2008.
- 45. Sauks K, Boynton EL, McKee, N.H., Agur, A.M:** Cellular and biomechanical changes in rat gastrocnemius following calcaneal tenotomy. American Association of Clinical Anatomists, Columbus, OH, July 15, 2011.
- 46. Sauks, K, Boynton EL, McKee N, Agur, A:** Injection treatment following calcaneal tenotomy in rats: Does Truameel and/or PRP make a difference? Clinical Anatomy, 2012.
- 47. Atkinson J, Sauks K, Boynton EL, McKee N, and Agur AM:** Injection treatment following rat calcaneal tenotomy: does Traumeel S and/or PRP make a difference? Clinical Anatomy Conference 2013.
- 48. Boynton EL:** Back in the Game: Return to Sport after a wear and tear injury. USCCE National Coaches Conference Atlanta, May 22, 2017.

49. **Boynton EL:** Assessment of the Shoulder in Tennis. WTCA Conference New York, August 27, 2017.
50. **Boynton EL:** The shoulder in Tennis, how injuries evolve. Indian Wells PTR/WTC coaches conference, March 6, 2018.
51. **Boynton EL:** Common Elbow Injuries in Tennis. Society for Tennis Medicine and Science, 10 November 2018, USTA National Campus, Lake Nona, Orlando Florida.
52. **Boynton EL:** WherenTear Injuries in Tennis, How it All Begins. American Medical Tennis Association, 12 November 2019, USTA National Campus, Lake Nona, Orlando Florida.

Poster Presentations, Scientific Exhibits and Movie Presentations

1. **Boynton EL, Kabo JM, Shapiro MS:** The biomechanics of the Bankart repair. (Poster) Orthopaedic Research Society, New Orleans, Louisiana, USA, 20-23 February 1994.
2. **Boynton EL:** Human osteoblast survive and deposit new bone when viable human bone is implanted in the SCID mouse. (Poster) Orthopaedic Research Society, Atlanta, Georgia, USA, 18-22 February 1996.
3. **Voronov I, Hinck A, Callahan JW, Boynton EL:** Development of an in vitro model for studying polyethylene phagocytosis by macrophage. (Poster) Canadian Orthopaedic Association 51st Annual Meeting, Quebec City, Quebec, 25 May 1996.
4. **Sarcinella L, Boynton EL:** Polyethylene activated macrophage resorption of hydroxy apatite. (Poster) 5th World Biomaterials Congress, Metro Toronto Convention Centre, Toronto, Ontario, Canada, 29 May 1996.
5. **Voronov I, Hinek A, Callahan JW, Santerre JP, Boynton EL:** Phagocytosis of polyethylene particulate by macrophage in vitro. (Poster) 5th World Biomaterials Congress, Toronto, Ontario, Canada, 2 June 1996.
6. **Kaminker R, Boynton EL:** Survival and function of human bone transplanted into the non-SCID mouse. (Poster) Canadian Orthopaedic Research Society, Hamilton, Ontario, Canada, 1 May 1997.
7. **Harrison MM, Sandhu J, Boynton EL:** A method of immunohistochemical staining for inflammatory cytokines in human bone. (Poster) Canadian Orthopaedic Research Society, 32nd Annual Meeting, Ottawa, Ontario, Canada, 20 June 1998.

8. **Harrison M, Sandhu J, Boynton EL:** Effect of lipopolysaccharide on bone formation in human bone transplanted in non-SCID mice. (Poster Presentation) Canadian Orthopaedic Research Society, 32nd Annual Meeting, Ottawa, Ontario, Canada, 20 June 1998.
9. **Waddell J, Gryn timer M, Boynton EL:** Analysis of the effect of polyethylene particles and surgery on bone formation using static and dynamic histomorphometry. (Poster) Canadian Orthopaedic Research Society, 33rd Annual Meeting, St. John's Newfoundland, Canada, 3 July 1999.
10. **Xing S, Boynton EL, Labow R, Santerre P:** The effect of Chemically Altered Polyethylene on Human Macrophage Enzyme Synthesis. (Poster Presentation) Canadian Orthopaedic Research Society, 35th Annual Meeting, London, Ontario, Canada, 1 June 2001.
11. **Kim S., Bleakney RB., Boynton EL., Agur AM.:** Development of an ultrasound protocol to investigate the static and dynamic in vivo musculotendinous architecture of the supraspinatus. 24th Annual Meeting of American Association of Clinical Anatomists. Henderson, Nevada. June 2007.
12. **Sauks, K, Boynton, E., McKee, N., Agur, A.** Injection treatment following calcaneal tenotomy in rats: Does Truameel and/or PRP make a difference? Canadian CAM Research Conference. Location: University of Toronto. November 3-4, 2012.
13. **Sauks, K, Boynton, E., McKee, N., Agur, A.** Injection treatment following calcaneal tenotomy in rats: Does Truameel and/or PRP make a difference? Rehabilitation Science Sector Showcase: "Charting New Territory in Research and Education". Location: University of Toronto. May 2, 2012.
14. **Sauks K, Guenette M, Meng J, Boynton E, Agur, A:** Intramuscular innervation of vastus medialis (VM): can VM be divided into a longus and obliquus part? American Association of Clinical Anatomists. Location: Honolulu, Oahu, July 19-24, 2010.
15. **Sauks K, Guenette M, Meng J, Boynton E, Agur, A:** Intramuscular innervation of the vastus medialis: can the muscle be separated into vastus medialis longus and vastus medialis obliquus? Poster for Graduate Department of Rehabilitation Science and Department of Speech-Language Pathology Research Showcase. Location: University of Toronto, April 28, 2010
16. **Sauks K, Guenette M, Jung J, Boynton E, Agur A:** Muscle Architecture and Innervation of the Vastus Medialis Muscle. Poster for Graduate Department of Rehabilitation Science and Department of Speech-Language Pathology Research Day, University of Toronto. Location: November 27, 2008.

17. Role of the Abdominal Musculature in Core Stability: A Novel 3D Anatomical and Biomechanical Study. PENG, Michael, Kathleen CHENG, Joshua WONG, Erin BOYNTON, and Anne M.R. AGUR, Division of Anatomy Department of Surgery, University of Toronto, Toronto, ON M5S 1A8, Canada **BASIC SCIENCE.**

Invited Visits to Other Hospitals/Universities/Etc.:

1. North American Hip and Knee Symposium, Toronto, Ontario, Canada 22-24 October 1993. The tissue response to polyethylene wear debris.
2. Queen's University, Kingston, Ontario, Canada 20 May 1994. Inflammatory response to polyethylene.
3. Canadian Orthopaedic Association, Canadian Orthopaedic Research Society, Halifax, Nova Scotia, Canada 3 June 1995. The immunological consequences of polyethylene debris – instructional course lecture.
4. Dow Corning Corporation, Toronto, Ontario, Canada 12 January 1996. Silicone symposium.
5. Canadian Orthopaedic Association, Hamilton, Ontario Canada, 1 June 1997. The female athlete: A special case of osteoporosis.
6. 32nd Annual Meeting of the Canadian Orthopaedic Research Society, Ottawa, Ontario, Canada, 20 June 1998. Human macrophage particulate polyethylene interaction in vitro.
7. Health Canada, Therapeutic Products Programme, Continuing Education Office, Ottawa, Ontario, Canada, March 1999. Implantable devices, including calcification and how they function.
8. Orthopadische Klinik, Dr. Axel Baltzer, Henrich-Heine-Universitat Dusseldorf, Dusseldorf, Germany, 5-6 August 1999. The role of PE surface chemistry in total joint replacement failure.
9. Hospital General de Agudos “Carols G. Durand”, Buenos Aires, Argentina, 3 November 2000. The role of the macrophage in total joint replacement.
10. Faculty of Dentistry, Toronto, Ontario, Canada, 1 April 2001. The effect of phagocytosis of polyethylene on mature human monocytes derived macrophage viability.

11. Prof. R. Windhager, Institute for Histology and Embryology, University of Vienna, Vienna, Austria, 7 September 2001. "The Role of Macrophage in Periprosthetic Bone Loss."
12. Canadian Society of Medical Evaluators, Toronto, Ontario, Canada, 16 April 2004. "Upper Extremity Pain and Dysfunction: A Practical Approach to the Diagnosis and Management of Common and Sometimes Overlooked Conditions."
13. Faculty of Physical Therapy, University of Toronto, Ontario, Canada, 6 December 2008. Tissue Repair.
14. Faculty of Physical Therapy, University of Toronto, Ontario, Canada, 6 December 2008. Evolution of Musculoskeletal Injury.
15. Faculty of Physical Therapy, University of Toronto, Ontario, Canada, 6 January 2009. Diagnostic Imaging.
16. Faculty of Physical Therapy, University of Toronto, Ontario, Canada, 6 January 2009. Clinical Implications of Tissue Healing II.
17. McCall Dawson Osterberg Handler law firm, 2009 September, Evolution of Musculoskeletal Disorders.
18. Faculty of Physical Therapy, University of Toronto, Ontario, Canada, 9 December 2009. Evolution of MSK Injury.
19. Faculty of Physical Therapy, University of Toronto, Ontario, Canada, 9 December 2009. MSK Tissue Injury and Healing.
20. Rehab Sciences Research Showcase, Sauks K, Boynton E., McKee, N.H., Agur, A.M: Cellular and biomechanical changes in rat gastrocnemius following calcaneal tenotomy. , Toronto, May 11, 2011.
21. Faculty of Physical Therapy, University of Toronto, Ontario, Canada, 3 January 2011. Clinical Implications of Tissue Healing I, case presentations.

RESEARCH AND INVESTIGATION:

Research Funding – Peer Reviewed

Bickell Foundation (\$17,282 1993-1994) Immunologic response to wear debris
Boynton EL

Trillium Award (\$20,000 1993-1998) Tissue response to polyethylene wear debris **Boynton EL**, Smith D

Women's Health Grant (\$15,000 1996-1997) The establishment of a model of human osteoblasts in health and disease **Boynton EL**, Sandhu J, Aubin J

CORE/ACORE Grant Award (\$15,000 1996-1997) In vitro model of particle :Macrophage interactions **Boynton EL**

Zimmer Canada (\$50,000 1997) Hu-Bone SCID model of osteolysis **Boynton EL**, Sandhu J

Osteotech (\$33,600 1997-1998) Allografts, grafton and human marrow in SCID mice **Boynton EL**, Aubin J, Sandhu J

The Arthritis Society Research Grant (\$45,000 1999-2003) Macrophages and the role of PE chemistry in total joint replacement failure **Boynton EL**

The Arthritis Society Junior Scholarship Award (\$80,377 2001-2004) The role of macrophage in polyethylene mediated total joint replacement failure. **Boynton EL**

Salter Award (\$10,000-1999) Development of In Vitro Model of Human macrophage-PE particulate interaction. **Boynton EL**

Carroll Laurin Award (\$15,000 2000) Characterization of Activated MDM in vitro after long-term exposure to particulate PE **Boynton EL**

Canadian Orthopaedic Foundation (\$10,000 2006) Investigation of the supraspinatus muscle and tendon architecture in normal and full-thickness tendon tears: A cadaveric and ultrasonographic study **Boynton EL**, Agur AM, Kim SY, Richardson D, Bleakney R

Research Funding – Non-Peer Reviewed

Zimmer Canada (\$50,000 1994-1995) Biodegradation of polyethylene **Boynton EL**

Medical Research Council of Canada/Zimmer Canada (\$150,000 1995-1998) Biodegradation of polyethylene wear particles **Boynton EL**, Santerre P, Callahan J

Dow Corning (\$76,000 1998-2001) Macrophage: Silicone interactions in vitro inflammation versus immunity **Boynton EL**

GRADUATE STUDENTS SUPERVISED

Kate Sauks, PhD Thesis: "The role of homeopathic injections in the treatment of chronic tendon injuries". Sept 2007-Oct 2014.

Soo Kim, PhD Thesis: "The 3D Architecture of the Supraspinatus Muscle: correlation with US images in normals. Univ of Toronto, 2004-2009.

Cecilia Kim, M.Sc. Thesis: "Interactions of UHMWPE particles with monocytes", IBBME, Univ. of Toronto, July 2005.

Jennifer Waddell, M.Sc. Thesis: "Increased cytokine secretion in patients with failed implants compared with patients with primary implants." Univ. of Toronto, July 2003.

Grace Yu; M.Sc. Thesis: "Role of Cobalt ion in the Generation of Degradation products from UHMWPE", August 2000.

Shaimo Xing, M.Sc. *Thesis*: "Response of Human Monocyte Derived Macrophage to UHMWPE Particles", Faculty of Dentistry, Univ. of Toronto March 2000.

Angela Lee, M Sc *Thesis*: "In Vitro Degradation of Ultra High Molecular Weight

Polyethylene (UHMWPE) Particulates Generated from the Wear of Orthopaedic Implants", M.Sc., Univ. of Toronto, Jan. 1998.

Irina Voronov, M Sc. *Thesis*: "Identification of Macrophage Responses to Polyethylene Particulate", Univ. of Toronto, Jan 1997.

HOBBIES

Avid Athlete, love Tennis and Road Biking. Enjoy writing poetry.