**CURRICULUM VITAE FOR ACADEMIC PROMOTION**

**The Johns Hopkins University School of Medicine**

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**Lew Charles Schon, M.D.** [Date of this version]

**DEMOGRAPHIC AND PERSONAL INFORMATION**

**Current Appointments**

**University**

2003-2014Assistant Professor of Orthopaedic Surgery, Part-time, Johns Hopkins University School of Medicine, Baltimore, MD

2009-2014 Assistant Professor of Biomedical Engineering, Part-time, Johns Hopkins University School of Medicine, Baltimore, MD

2014-Present Associate Professor of Orthopaedic Surgery and Biomedical Engineering, Part-time, Johns Hopkins University School of Medicine, Baltimore, MD

2005-Present Clinical Associate Professor of Orthopaedic Surgery, Georgetown University School of Medicine, Washington, DC

**Hospital**

1990-Present Attending Orthopaedic Surgeon, Subspecialty in Foot and Ankle, Orthopaedic Residency Teaching Staff, Director of Dance Science Externship with Goucher College, Medstar Union Memorial Hospital, Baltimore, MD

1991-Present Attending Orthopaedic Surgeon, Medstar Good Samaritan Hospital, Baltimore, MD

1999-Present Attending Orthopaedic Surgeon, Greater Chesapeake Surgery Center, Lutherville, MD

2001-Present Director of Foot & Ankle Division, director of Foot & Ankle Fellowship, Medstar Union Memorial Hospital, Baltimore, MD

2003-Present Active Staff Part-Time, Department of Orthopaedic Surgery, Johns Hopkins Medical Institutions, Baltimore, MD

2005-Present Orthobiologics LaboratoryFounder & Director, Medstar Union Memorial Hospital, Baltimore, MD

**Personal Data**

Orthopaedic Surgery (Foot and Ankle)

Union Memorial Hospital

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**Education and Training**

1982 BS, Biology Major/History Minor; Union College, Schenectady, NY

1984 Doctor of Medicine, Albany Medical College, Albany, NY

Postdoctoral

1984-1985 Internship, General Surgery, Mount Sinai Medical Center, New York, NY

1985-1989 Residency, Orthopaedic Surgery, Hospital for Joint Disease Orthopaedic Institute, New York, NY

1988 American Orthopaedics Scholar, Foot and Ankle Surgery, University of Washington Harborview Medical Center, Seattle, WA

1989-1990 Fellowship, Foot and Ankle Orthopaedic Surgery, University of Texas Health Science, Houston, TX

**Professional Experience**

1. Instructor, Touro College, New York, NY

Clinical Instructor of Orthopaedics, Clinical Instructor of Family Medicine, University of Texas Medical School, Houston, TX

1990-Present Attending Orthopaedic Surgeon, Medstar Union Memorial Hospital, Baltimore, MD

1990-Present Director, Foot and Ankle Orthopaedic Division, Medstar Union Memorial Hospital, Baltimore, MD

1990-Present Director, Foot and Ankle Fellowship, Medstar Union Memorial Hospital, Baltimore, MD

1990-Present Teaching Staff, Orthopaedic Residency, Medstar Union Memorial Hospital, Baltimore, MD

1990-Present Director, Dance Science Externship, Goucher College, Baltimore, MD

1991-Present Attending Orthopaedic Surgeon, Medstar Good Samaritan Hospital, Baltimore, MD

1999-2008 Member of the Board of Directors, Greater Chesapeake Surgery Center, Baltimore, MD

2000-2005 Attending Orthopaedic Surgery, Hospital for Joint Diseases Orthopaedic Institute, New York, NY

2003-Present Active Staff, Part-Time, Department of Orthopaedic Surgery, Johns Hopkins Medical Institutions, Baltimore, MD

2003- Present Assistant Professor of Orthopaedic Surgery, Part-Time, Johns Hopkins University, Baltimore, MD

2005-Present Clinical Associate Professor of Orthopaedics Surgery, Georgetown University Medical Center, Washington, DC

2009-2014 Assistant Professor of Biomedical Engineering, Part-time, Johns Hopkins University School of Medicine, Baltimore, MD

2014-Present Associate Professor of Orthopaedic Surgery and Biomedical Engineering, Part-time, Johns Hopkins University School of Medicine, Baltimore, MD

**RESEARCH ACTIVITIES**

**Publications**: **Peer-reviewed Original Science Research**

1. **Schon LC**, Zuckerman JD. Hip pain in the elderly: Evaluation and diagnosis. Geriatrics. 1988; 43:48-62.
2. **Schon LC**, Baxter DE. Neuropathies of the foot and ankle in athletes. Clin Sports Med. 1990; 9(2): 489-509.
3. Clanton TO, **Schon LC**, Baxter DE. An overview of subtalar instability and its treatment. Perspective OrthopSurg. 1990; 1:103-113.
4. Saxby T, Myerson M, **Schon L**. Compartment syndrome of the foot following calcaneus fracture. Foot/Ankle. 1992; 2:157-161.
5. **Schon LC**, Glennon TP, Baxter DE. Heel pain syndrome: Electrodiagnostic support for nerve entrapment. Foot/Ankle. 1993; 14:129-135.
6. Skalley TC, **Schon LC**, Hinton RY, Myerson MS. Clinical results following revision tibial nerve release. Foot/ Ankle Internat. 1994; 15(7):360-367.
7. **Schon LC**, Biddinger KR, Greenwood P. Dance screen programs and development of dance clinics. Clin Sports Med. 1994; 13:865-882.
8. **Schon LC**. Nerve entrapment, neuropathy, and nerve dysfunction in athletes. Orthop Clinics of North America. 1994; 25:47-59.
9. Myerson MS, Corrigan J, Thompson F, **Schon LC**. Tendon transfer combined with calcaneal osteotomy for the treatment of posterior tibial tendon insufficiency: A radiological investigation. Foot/Ankle Int. 1995; 16:712-718.
10. **Schon LC**, Marks RM. The management of neuroarthropathic fracture-dislocations in the diabetic patient. OrthopClin of North America. 1995; 26:375-392.
11. Davis TJ, **Schon LC**. Branches of the tibial nerve: Anatomic variations. Foot/Ankle Int. 1995; 16:21-29.
12. Weinfeld SB, **Schon LC**, Myerson MS. Controversies and perils: Fusions of the foot and ankle in patients with rheumatoid arthritis. Tech in Ortho. 1996; 11:224-235.
13. **Schon LC**, Weinfeld SB. Lower extremity musculoskeletal problems in dancers. Current Opinion Rheum. 1996; 8:130-142.
14. **Schon LC**, Bell W. Tips and pearls: Crush-plasty of the calcaneus. Tech in Ortho. 1996; 11:222-223.
15. **Schon LC**, Bell W. Fusions of the transverse tarsal and midtarsal joints. Foot Ankle Clin. 1996; 1:93-108.
16. **Schon LC**. Tips and pearls: derotational triple arthrodesis for severe pes plano valgus correction. Tech in Ortho. 1996; 11:294-295.
17. Mont MA, **Schon LC**, Hungerford MW, Hungerford DS. Avascular necrosis of the talus treated by core decompression. Journ of Bone/Joint Surg. 1996; 78B:827-830.
18. Bell W, **Schon LC**. Tendon lacerations in the toes and foot. Foot Ankle Clin.1996; 1:355-372.
19. Levine SE, Myerson MS, Lucas P, **Schon LC**. Salvage of pseudoarthrosis after tibiotalar arthrodesis. Foot/Ankle Int. 1997; 18:580-585.
20. Haddad SL, Myerson MS, Pell RFIV, **Schon LC**. The clinical and radiographic outcome of revision surgery for failed triple arthrodesis. Foot/Ankle Int. 1997; 18:489-499.
21. **Schon LC**, Bell W. Fusion of the transverse tarsal and midtarsal joints. Foot Ankle Clin. 1998; 1:93-108.
22. **Schon LC**, Weinfeld SB. Hallux metatarsophalangeal joint. Clin Ortho. 1998; 349:9-19.
23. **Schon LC**, Weinfeld SB, Horton GA, Resch S. Radiographic and clinical classification of acquired midtarsus deformities. Foot/Ankle Int. 1998; 19(6):394-404.
24. **Schon LC**, Easley ME, Weinfeld SB. Charcot neuroarthropathy of the foot and ankle. Clin Ortho. 1998; 349:116-131.
25. Mizel MS, Temple HT, Michelson JD, et al. Thromboembolism after foot and ankle surgery: A multicenter study. Clin Ortho. 1998; 348:180-185.
26. McGarvey WC, Trevino SG, Baxter DE, Noble PC, **Schon LC**. Tibiotalocalcaneal arthrodesis: Anatomic and technical considerations. Foot/Ankle Int. 1998; 19(6):363-369.
27. Marks RM, **Schon LC**. Posttraumatic posterior tibialis tendon insertional elongation with functional incompetency: A case report. Foot/Ankle Int. 1998; 19(3):80-183.
28. Marks RM, Parks B, **Schon LC**. Assessment and management of the rocker-bottom foot. Part II: A new neuropathic midfoot fusion technique for neuropathic feet: Biomechanical analysis and rationale. Foot/Ankle Int. 1998; 19(8):507-510.
29. Cunningham BW, DiStefano AF, Kirjanov NA, Levine SE, **Schon LC**. A comparative biomechanical analysis of the pointe shoe toe box: An in-vitro study. American Journal of Sports Med. 1998; 26(4): 555-561.
30. Campbell JT, **Schon LC**, Parks BG, Wang Y, Berger BI. Mechanical comparison of biplanar proximal closing wedge osteotomy with plantar plate fixation versus crescentic osteotomy with screw fixation for the correction of metatarsus primus varus. Foot/Ankle Int. 1998; 19:293-299.
31. Campbell JT, **Schon LC**, Burkhardt LD. Histopathologic findings in autogenous saphenous vein graft wrapping for recurrent tarsal tunnel syndrome: A case report. Foot/Ankle Int. 1998; 19(1):766-769.
32. Biddinger KR, Komenda GA, **Schon LC**, Myerson MS. A new modified technique for harvest of calcaneal bone grafts in surgery on the foot and ankle. Foot/Ankle Int. 1998; 19(5):322-326.
33. Mann MR, Acevedo JI, Easley ME, **Schon LC**. Seven-year review illuminates Charcot management. BioMech. 1999; 6:39-49.
34. Weinfeld SB, **Schon LC**. Amputations of the perimeters of the foot. Resections of toes, metatarsals, rays, and calcaneus. Foot Ankle Clin. 1999; 4:17-37.
35. **Schon LC**, DiStefano AF. Evaluation and treatment of posterior tibialis tendinitis: A case report and treatment protocol. Journal of Dance Med and Science. 1999; 3:24-27.
36. **Schon LC**, Acevedo JI, Mann MR. Technique tip: The sliding wedge local bone graft for midfoot arthrodesis. Foot/Ankle Int. 1999; 20:340-341.
37. Melamed EA, **Schon LC**. Lower limb amputation as a salvage for severe trauma. Foot Ankle Clin.1999; 4:77-96.
38. Kann JN, Parks BG, **Schon LC**. Biomechanical evaluation of two different screw positions for fusion of the calcaneocuboid joint. Foot/Ankle Int. 1999; 20:33-36.
39. Trnka H-J, Parks BG, Ivanic G, Chu I-T, Easley ME, **Schon LC**, Myerson MS. Six first metatarsal shaft osteotomies: Mechanical and immobilization comparisons. Clin Orthop. 2000; 381:256-265.
40. Pell RFIV, **Schon LC**, Myerson MS. Clinical outcome after primary triple arthrodesis. Journal of Bone/Joint Surg. 2000; 82A:47-57.
41. Myerson MS, **Schon LC**, McGuigan FX, Oznur A. Result of arthrodesis of the hallux metatarsophalangeal joint using bone graft for restoration of length. Foot/Ankle Int. 2000; 21:297-306.
42. Melamed EA, Myerson MS, **Schon LC**. A review of tendon passing techniques and introduction of a new method using a suction tip. Foot/Ankle Int. 2000; 21:693-696.
43. **Schon LC**, Cohen I, Horton GA. Treatment of the diabetic neuropathic flatfoot. Techniques of Orthopaedics. 2000; 15:277-289.
44. Easley ME, Trnka H-J, **Schon LC**, Myerson MS. Isolated subtalar arthrodesis. Journal of Bone/Joint Surg. 2000; 82-A:613-624.
45. Easley ME, **Schon LC**. Peripheral nerve vein wrapping for intractable lower extremity pain. Foot/Ankle Int. 2000; 21:492-500.
46. Kleeman TJ, Chiodo CP, Lam PWC, Levin GB, **Schon LC**. A prospective analysis of peripheral nerve stimulation for lower extremity nerve pain. Intern Functional Electrical Stim Soc. 2000;
47. Raikin SM, **Schon LC**. Nerve entrapments of the foot and ankle of an athlete. Sports Med and Arthroscopy Rev. 2000; 8:387-394.
48. Trnka H-J, Easley ME, Lam PWC, Anderson CD, **Schon LC**, Myerson MS. Subtalar distraction bone block arthrodesis. Journal of Bone/Joint Surg. 2001; 83B:849-854.
49. **Schon LC**, Lam PWC, Easley ME, Anderson CD, Lumsden DB, Shanker J, Levin GB. Complex salvage procedures for severe lower extremity neuropathic pain. Clin Orthop. 2001; 391:171-180.
50. **Schon LC**, Anderson CD, Easley ME, Lam PWC, Trnka H-J, Lumsden DB, Levin G, Shanker J. Surgical treatment of chronic lower extremity neuropathic pain. Clin Orthop. 2001; 389:156-164.
51. Raikin SM, Parks BG, **Schon LC**, Noll KH. Biomechanical evaluation of the ability of casts and braces to immobilize ankle and hindfoot. Foot/Ankle Int. 2001; 22:214-219.
52. **Schon LC**, Short KW, Soupiou O, Noll K, Rheinstein J. Benefits of early prosthetic management of transtibial amputees: A prospective clinical study of a prefabricated prosthesis. Foot/Ankle Int. 2002; 23:509-514.
53. **Schon LC**, Edwards WHB, McGuigan FX, Hoffman J. Pedobarographic and musculoskeletal examination of collegiate dancers in releve. Foot/Ankle Int. 2002; 23:641-646.
54. **Schon LC**, Easley ME, Cohen I, Lam PWC, Badekas A, Anderson CD. The acquired midtarsus deformity classification system: Interobserver reliability and intraobserver reproducibility. Foot/Ankle Int. 2002; 23:30-36.
55. Neufeld SK, Parks BG, Naseef G, Melamed EA, **Schon LC**. Arthrodesis of the first metatarsophalangeal joint: A biomechanical study comparing memory compression staples, cannulated screws, and a dorsal plate. Foot/Ankle Int. 2002; 23:97-101.
56. Melamed EA, **Schon LC**, Myerson MS, Parks BG. Two modifications of the Weil osteotomy: Analysis on sawbone models. Foot/Ankle Int. 2002; 23:400-405.
57. Boucher HR, Parks BG, Kleeman TJ, Dunn WR, Badekas A, Melamed EA, Noll KH, **Schon LC**. A biomechanical study of two postoperative prostheses for transtibial amputees: A custom molded and prefabricated adjustable pneumatic prosthesis. Foot/Ankle Int. 2002; 23:451-456.
58. Acevedo JI, Sammarco VJ, Boucher HR, Parks BG, **Schon LC**, Myerson MS. Mechanical comparison of cyclic loading in five different first metatarsal shaft osteotomies. Foot/Ankle Int. 2002; 23:711-716.
59. Raikin SM, **Schon LC**. Arthrodesis of the fourth and fifth tarsometatarsal joints of the midfoot. Foot/Ankle Int. 2003; 24:584-590.
60. Lumsden DB, **Schon LC**, Easley M, Duouguih, WA, Anderson CD, Miller SD, Ottry DK. Topography of the distal tibial nerve and its branches. Foot/Ankle Int. 2003; 24:696-700.
61. Chiodo CP, Acevedo J, Sammarco VJ, Prks BG, Boucher HR, Myerson MS, **Schon LC**. Intramedullary rod fixation compared with blade-plate-and-screw fixation for tibiotalocalcaneal arthrodesis: A biomechanical investigation. Journal of Bone/Joint Surg. 2003; 85A:2425-2428.
62. Pinzur MS, Pinto MA, **Schon LC**, Smith DG. Controversies in amputation surgery. Instr Course Lect. 2003; 52:445-451.
63. Vora AM, **Schon LC**. Revision peripheral nerve surgery. Foot Ankle Clin. 2004 Jun; 9(2):305-318.
64. **Schon LC**, Short KW, Parks BG, Kleeman TJ, Mroczek KJ. Efficacy of a new pressure-sensitive alarm for clinical use in orthopaedics. Clin Orthop. 2004 Jun; 423:235-239.
65. **Schon LC**. Salvage of failed heel pain surgery. In: Nunley JA, Pfeffer GB, Sanders RW, Trepman E, (eds). Advanced Reconstruction: Foot and Ankle. Rosemont, IL: AAOS; 2004: 349-352.
66. Myerson MS, Badekas A, **Schon LC**. Treatment of stage II posterior tibial tendon deficiency with flexor digitorum longus tendon transfer and calcaneal osteotomy. Foot/Ankle Int. 2004 Jul; 25(7):445-50.
67. Lau JTC, Stamatis ED, Parks BG, **Schon LC**. Modifications of the Weil osteotomy have no effect on plantar pressure. Clin Orthop. 2004 Apr; 421:194-198.
68. Dunn WR, Easley ME, Parks BG, Trnka H-J, **Schon LC**. An augmented fixation method for distal fibular fractures in elderly patients: A biomechanical evaluation. Foot/Ankle Int. 2004 Mar; 25(3):128-131.
69. Chiodo CP, **Schon LC**, Myerson MS. Clinical results with the Ludloff osteotomy for correction of adult hallux valgus. Foot/Ankle Int. 2004 Aug; 25(8):532-536.
70. Title CI, Jung H-G, Parks BG, **Schon LC**. The peroneal groove deepening procedure: A biomechanical study of pressure reduction. Foot/Ankle Int. 2005 Jun; 26(6):442-448.
71. Sharma KM, Parks BG, Nguyen A, **Schon LC**. Plantar-to-dorsal compared to dorsal-to-plantar screw fixation for proximal chevron osteotomy: A biomechanical analysis. Foot/Ankle Int. 2005 Oct; 26(10):854-858.
72. **Schon LC**, Dom KJ, Jung H-G. Clinical tip: Stabilization of the proximal Ludloff osteotomy. Foot/Ankle Int. 2005 Jul; 26(7):579-581.
73. Sanders AP, Weijers RE, Snijders CJ, **Schon LC**. Three-dimensional reconstruction of magnetic resonance images of a displaced flexor hallucis longus tendon in hallux valgus. Journal of American Podiatric Med Ass. 2005 Jul; 95(4):401-404.
74. Rosenfeld JF, Parks BG, **Schon LC**. Biomechanical investigation of optimal fixation of isolated talonavicular joint fusion. Winner of Resident Writer's Award. American Journal of Orthop. 2005 Sep; 34(5):445-448.
75. Lau JTC, Mahomed NN, **Schon LC**. Results of an Internet survey determining the most frequently used ankle scores by AOFAS members. Foot/Ankle Int. 2005 Jun; 26(6):479-482.
76. Jung H-G, Zaret D, Parks BG, **Schon LC**. Effect of first metatarsal shortenings and dorsiflexion osteotomies on forefoot plantar pressure in a cadaveric model. Foot/Ankle Int. 2005 Sep; 26(9):748-753.
77. Jung H-G, Guyton GP, Parks BG, Title CI, Dom KJ, Nguyen A, et al. Supplementary axial Kirschner wire fixation for crescentic and Ludloff proximal metatarsal osteotomies: A biomechanical study. Foot/Ankle Int. 2005 Aug; 26(8):620-626.
78. Cohen DA, Parks BG, **Schon LC**. Screw fixation compared to H-locking plate fixation for first metatarsocuneiform arthrodesis: a biomechanical study. Foot/Ankle Int. 2005 Nov; 26(11):984-989.
79. Vora AM, Tien TR, Parks BG, **Schon LC**. Correction of moderate and severe acquired flexible flatfoot with medializing calcaneal osteotomy and flexor digitorum longus transfer. Journal of Bone/Joint Surg. 2006 Aug; 88(8):1726-1734.
80. Van Aman SE, **Schon LC**. Subtalar arthroereisis as adjunct treatment for type II posterior tibial tendon deficiency. Tech of Foot/Ankle Surg. 2006; 5(2):117-125.
81. Chodos MC, **Schon LC**. Osteochondral lesions of the talus: Current treatment modalities and future possibilities. Current Opinion in Orthop. 2006 Mar; 17:111-116.
82. Miller SD, **Schon LC**. Clinical tip: Late medial ankle pain as indicator of syndesmotic instability. Foot/Ankle Int. 2006 Sep; 27(9):746-747.
83. Means KR, Jr. Parks BG, Nguyen A, **Schon LC**. Intramedullary nail fixation with posterior-to-anterior compared to transverse distal screw placement for tibiotalocalcaneal arthrodesis: A biomechanical investigation. Foot/Ankle Int. 2006 Dec; 27(12):1137-1142.
84. Baumhauer JF, O'Keefe RJ, **Schon LC**, Pinzur MS. Cytokine-induced osteoclastic bone resorption in Charcot arthropathy: An immunohistochemical study. Foot/Ankle Int. 2006 Oct; 27(10):797-800.
85. Benthien RA, Parks BG, Guyton GP, **Schon LC**. Lateral column calcaneal lengthening, flexor digitorum longus transfer, and opening wedge medial cuneiform osteotomy for flexible flatfoot: A biomechanical study. Foot/Ankle Int. 2007 Jan; 28(1):70-77.
86. Jung H-G, Parks BG, Nguyen A, **Schon LC**. Effect of tibiotalar joint arthrodesis on adjacent tarsal joint pressure in a cadaveric model. Foot/Ankle Int. 2007 Jan; 28(1):103-108.
87. Bae S-Y, **Schon LC**. Surgical strategies: Ludloff first metatarsal osteotomy. Foot/Ankle Int. 2007 Jan; 28(1):137-144.
88. Jung HG, Myerson MS, **Schon LC**. Spectrum of operative treatments and clinical outcomes for atraumatic osteoarthritis of the tarsometatarsal joints. Foot/Ankle Int. 2007 Apr; 28(4):482-489.
89. Logel KJ, Parks BG, **Schon LC**. Calcaneocuboid distraction arthrodesis and first metatarsocuneiform arthrodesis for correction of acquired flatfoot deformity in a cadaver model. Foot/Ankle Int. 2007 Apr; 28(4):435-440.
90. Keeling JJ, **Schon LC**. Risk to neurovascular structures using posterolateral percutaneous ankle screw placement: A cadaver study. Foot/Ankle Int. 2007 May; 28(5):614-616.
91. O'Neill PJ, Parks BG, Walsh R, Simmons LM, **Schon LC**. Biomechanical analysis of screw-augmented intramedullary fixation for tibiotalocalcaneal arthrodesis. Foot/Ankle Int. 2007 Jul; 28(7):804-809.
92. **Schon, LC**. Subtalar arthroereisis: A new exploration of an old concept. Foot Ankle Clin North America. 2007; 12(2):329-339.
93. Van Aman SE, Rivera VR, Khazen GE, **Schon LC**. Preliminary findings using subtalar arthroereisis as adjunct treatment for correction of acquired flexible flatfoot: Short-term radiographic results. Revista ABTPé. 2007 Dec; 1(2):13-17.
94. League AC, Parks BG, Oznur A, **Schon LC**. Transarticular versus extraarticular ankle pin fixation: A biomechanical study. Foot/Ankle Int. 2008 Jan; 29(1):62-65.
95. Kirk KL, **Schon LC**. Technique tip: Periosteal flap augmentation of the Brostrom lateral ankle reconstruction. Foot/Ankle Int. 2008 Feb; 29(2):254-255.
96. Chodos MD, Parks BG, **Schon LC**, Guyton GP, Campbell JT. Blade plate compared with locking plate fixation for tibiotalocalcaneal arthrodesis: A cadaver study. Foot/Ankle Int. 2008 Feb; 29(2):219-224.
97. O'Neill PJ, Logel KJ, Parks BG, **Schon LC**. Rigidity comparison of locking plate and intramedullary fixation for tibiotalocalcaneal arthrodesis. Foot/Ankle Int. 2008 Jun; 29(6):581-586.
98. Title CI, **Schon LC**. Morton neuroma: Primary and secondary neurectomy. Journal of AAOS. 2008 Sep; 16(9):550-557.
99. Gruber FW, Sinkov VS, Bae S-Y, Parks BG, **Schon LC**. Crossed screws versus dorsomedial locking plate with compression screw for first metatarsocuneiform arthrodesis: A cadaver study. Foot/ Ankle Intern. 2008 Sep; 29(9):927-930.
100. League AC, Parks BG, **Schon LC**. Radiographic and pedobarographic comparison of femoral head allograft versus block plate with dorsal opening wedge medial cuneiform osteotomy: A biomechanical study. Foot/ Ankle Intern. 2008 Sep; 29(9):922-926.
101. Kirk KL, Campbell JT, Guyton GP, Parks BG, **Schon LC**. ATFL elongation after Brostrom procedure: A biomechanical investigation. Foot/ Ankle Intern. 2008 Nov; 29(11):1126-1130.
102. Kirk KL, Campbell JT, Guyton GP, **Schon LC**. Accuracy of posterior subtalar joint injection without fluoroscopy. Clin Orthop and Related Research. 2008 Nov; 466(11):2856-2860.
103. Scherb MB, Han S-H, Courneya J-P, Guyton GP, **Schon LC**. Effect of bupivacaine on cultured tenocytes. Orthop. 2009 Jan; 32(1):26.
104. Han S-H, Lee JW, Parks BG, Courneya J-P, Guyton GP, **Schon LC**. The effect of extracorporeal shock wave therapy on cultured tenocytes. Foot/Ankle Int. 2009 Feb; 30(2):93-98.
105. **Schon LC**. Assessment of the foot and ankle in elite athletes. Sports Med Arthroscopy Rev. 2009 June; 17(2):82-86.
106. Allen PG, **Schon LC**. Hallux varus: Correction with the abductor hallucis tendon transfer and suture button construct insertion. Tech of Foot/Ankle Surg. 2009 Dec; 8(4):194-199.
107. Groth AT, Guyton GP, **Schon LC**. Lateral ankle ligament injuries in athletes: Diagnosis and treatment. Op Tech in Sports Med. 2010 Mar; 18(1):18-26.
108. Courneya JP, Luzina IG, Zeller CB, Rasmussen JF, Bocharov A, **Schon LC**, Atamas SP. Interleukins 4 and 13 modulate gene expression and promote proliferation of primary human tenocytes. Fibrogenesis & Tissue Repair. 2010;
109. Nadaud JP, **Schon LC**. Chronic Charcot midfoot reconstruction. Tech of Foot/Ankle Surg. 2010 Sep; 9(3):123-133.
110. Ohlson BL, Shatby MW, Parks BG, White KL, **Schon LC**. Periarticular locking plate versus intramedullary nail for tibiotalocalcaneal arthrodesis: A biomechanical investigation. American Journal of Orthop (Belle Mead NJ). 2011 Feb; 40(2):78-83.
111. Yan AY, Mesfin A, **Schon LC**. Lateral process talus fracture in a kayaking sports injury: A case report and review. Orthop. 2011 Apr; 34(4):296-299.
112. Chhabra A, Soldatos T, Chalian M, Faridian-Aragh N, Fritz J, Fayad LM, Carrino JA, **Schon L**C. 3-Tesla magnetic resonance imaging evaluation of posterior tibial tendon dysfunction with relevance to clinical staging. The Journal of Foot/Ankle Surg. 2011 May-Jun; 50(3):320-328.
113. Peters PG, Adams SB Jr, **Schon LC**. Interdigital neuralgia. Foot Ankle Clin. 2011 Jun; 16(2):305-315.
114. Adams SB Jr, Peters PG, **Schon LC**. Persistent or recurrent interdigital neuromas. Foot Ankle Clin. 2011 Jun; 16(2):317-325.
115. Adams SB, Jr., Yao JQ, **Schon LC**. Particulated juvenile articular cartilage allograft transplantation for osteochondral lesions of the talus. Tech of Foot/Ankle Surg. 2011 Jun;10(2):92-98.
116. Myers SH, **Schon LC**. Forefoot tendon transfers. Foot Ankle Clin. 2011 Sep; 16(3):471-488.
117. **Schon LC**, Peters PG, Jai X. The use of platelet-rich plasma in the management of foot and ankle conditions. Op Tech in Sports Med. 2011 Sep; 19(3):177-184.
118. Nadaud JP, Parks BG, **Schon LC**. Plantar and calcaneocuboid joint pressure after isolated medial column fusion versus medial and lateral column fusion: A biomechanical study. Foot/Ankle Int. 2011 Nov; 32:1069-1074.
119. Chhabra A, Soldatos T, Chalian M, Carrino JA, **Schon LC**. Current concepts review: 3T magnetic resonance imaging of the ankle and foot. Foot/Ankle Int. 2012 Feb; 33(2):164-171.
120. Wisbeck JM, Parks BG, **Schon LC**. Xenograft scaffold full-wrap reinforcement of Krackow Achilles tendon repair. Orthop. 2012 Mar 7; 35(3):e331-e334.
121. Peters PG, Parks BG, **Schon LC**. Anterior distal tibia plafondplasty for exposure of the talar dome. Foot/Ankle Int. 2012 Mar; 33(3):231-235.
122. Park JS, **Schon LC**. Acquired adult flatfoot deformity. In: Saxena A, (ed). International Advances in Foot and Ankle Surgery.Springer-Verlag; 2012:377-390
123. Miller SD, **Schon LC**. Arthroscopic filling of talar osteochondral defects with stem cell-rich collagen paste. Tech of Foot/Ankle Surg. 2012 Sep; 11(3):135-139.
124. Hembree CW, Groth AT, **Schon LC**, Guyton GP. Computed tomography analysis of third webspace injections for interdigital neuroma. Foot/Ankle Intern. 2012; Accepted.
125. Humbyrd C, **Schon LC**. Arthroereisis for correction of flexible flatfoot in children and adolescents. AAOS Orthop Know Online [serial online] 2012 Jan; 10(1).
126. Adams SB, Jr., Lewis J, Gupta A, Parekh SG, **Schon LC**. Cannulated screw delivery of bone marrow aspirate concentrate to a stress fracture nonunion: Technique tip. Foot/Ankle Int. 2013; 34:740-4.
127. **Schon LC**, Shores JL, Faro FD, Vora AM, Camire LM, Guyton GP. Flexor hallucis longus tendon transfer in treatment of Achilles tendinosis. The Jour of Bone/Joint Surgery. 2013 Jan; 95(1):54-60.
128. Coetzee JC, Giza E, **Schon LC**, Berlet GC, Neufeld S, Stone RM, Wilson EL. Treatment of osteochondral lesions in the ankle with a particulated juvenile cartilage allograft: Outcomes in a challenging clinical population. Foot/Ankle Int. 2013 March;
129. Hembree CW, Groth AT, **Schon LC**, Guyton GP. Computed tomography analysis of third webspace injections for interdigital neuroma. Foot/Ankle Int. 2013 Apr; 34(4):575-578
130. Watson JT, Foo T, Wu J, Moed BR, Thorpe M, **Schon LC**, Zhang Z. CD271 as a marker for mesenchymal stem cells in bone marrow versus umbilical cord blood. Cells Tissues Organs. 2013 May; 197:496-504.
131. Molligan J, **Schon LC**, Zhang Z. A stereologic study of the plantar fat pad in young and aged rats. Jour of Anatomy. 2013 May; 223:537-45.
132. Lee DC, **Schon LC**. The use of stem cell bearing sutures in foot and ankle surgery. Curr Orthop Pract. 2013 Dec; 24:465-8.
133. Yan AY, Faro FD, **Schon LC**. Using cement plugs in soft tissue infection and osteomyelittis. Orthop. 2014 Jan; 37(1):32-36.
134. Tan EW, **Schon LC**. Tarsal tuneel syndrome: Diagnosis and management. OKOJ. 2014 Feb;
135. **Schon LC**. Should patients with Morton neuroma be treated with cortisone injection? Jour Bone Joint Surg Am. 2014 Feb; 96:334.
136. Miller AG, **Schon LC**. Fixation of midfoot and forefoot fractures.Tech Orthop. 2014; 29:24-32.
137. Adams SB Jr, Thorpe MA, Parks BG, Aghazarian G, Allen E, **Schon LC**.  [Stem cell-bearing suture improves Achilles tendon healing in a rat model.](http://www.ncbi.nlm.nih.gov/pubmed/24403347) Foot Ankle Int. 2014 Mar; 35(3):293-9.
138. Dreger T, Watson JT, Akers W, Molligan J, Achilefu A, **Schon LC**, Zhang Z. Intravenous application of CD271- selected mesenchymal stem cells during fracture healing. J Orthop Trauma. 2014 Apr; 28(4): S15-S19.
139. **Schon LC**, Gill N, Thorpe M, Davis J, Nadaud J, Jooyoung K, Molligan J, Zhang Z. Efficacy of Mesenchymal Stem Cell Loaded Surgical Mesh in tendon repair in rats. J Translational Med. 2014 Apr; 12:110
140. Molligan J, **Schon LC**, Zhang Z. Dissection of the osteogenic and angiogenic signal pathways in bone development and regeneration with biochips. Biochips & Tissue Chips. 2014; 4:1
141. Choi WJ, Park MS, Park KH, Courneya JP, Cho JS, **Schon LC**, Lee JW. Comparative analysis of gene expression in normal and degenerative human tendon cells: Effect of cyclic strain. Foot/Ankle Int. 2014 June;

**Inventions, Patents, Copyrights**

4/9/02 Airlimb; immediate or early pneumatic leg prosthesis; Designed with Aircast and DFW; US Patent No: 6368357

6/3/03 Internal Fixation Device, Modular blade-rod, intramedullary fixation device; Designed with Concepts in Medicine, US Patent No: 6572620

1/1/04 Flex Four Lead; Fabricated and implanted, no intellectual property; Designed with Medtronic;

9/3/04 Surgical apparatus to allow replacement of degenerative ankle tissue; Ankle Cutting Jig; Designed with Concepts in Medicine, US Patent No: 2004/0193169

1/6/05 Ankle Joint Prosthesis and its Method for Implantation; Designed with Zimmer and Concepts in Medicine, US Patent Application: 7025790

4/11/06 Ankle Joint Prosthesis and its Method of Implantation; Total Ankle Replacement; Mobile ankle joint prosthesis and its method of implementation; US Patent No: 7025790

8/10/06 Airlift; Devices and methods for adjustable foot correction; Designed with Aircast/DJ Orthopaedics and Concepts in Medicine; US Patent Application No: 2006/0178606; Patent Awarded

8/24/06 ProStop Subtalar Arthroereisis implant; Prosthesis for correction for flat foot deformity; Designed with Arthrex and Concepts in Medicine; US Patent Application No: 2006/0190088;

Patent Awarded

7/3/07 Surgical apparatus to allow replacement of degenerative ankle tissue; Ankle Cutting Jig; Designed by Concepts in Medicine; US Patent No: 7238190

7/27/07 Foot Pressure Detection Device; Compliance Monitor; In-cast monitor that records patient weight bearing; Designed with Concepts in Medicine; Publication No. 2007/0161920 WO/2006/091715 ; International Application No: Pct/us2006/006371; Patent No: 7506563

11/8/07 Pneumatic Night Splint; Device and method for treating foot with adjustable bladder; Designed with Darco and Concepts in Medicine; US Patent Application No: 2007/0260164; Patent pending

6/19/08 Toe Protector; Detachable post-operative protective device for the toes and forefoot; Designed with Darco, Concepts in Medicine and David Rini; US Patent No: 20080141565

9/25/08 Adjustable Pneumatic Cell Foot Arthrosis; Air Orthotic Device; Designed with Concepts in Medicine; US Patent Aplication No: 2008/0229611

9/25/08 Foot specific plates/screws; Nexa Orthopaedics product line of internal fixation devices; Sold to Tornier; Patent pending

2/24/09 Minimally invasive calcaneal fracture plate; Plate and system for lateral treatment of a fracture of the calcaneus; Wave Plate ; Designed with Tornier; Provisional Patent No: 61/155021; French Patent No: 0935233; Patent No: 2010/0217327;

3/3/09 Modular Blade Rod; Intermedullary fixation device; Designed with Concepts in Medicine; Doc No: 20090062796

3/24/09 Foot Pressure Detection Device Compliance Monitor; In-cast monitor that records patient weight bearing; Designed with Concepts in Medicine; Publication No. 2007/0161920 WO/2006/091715 ; International Application No: Pct/us2006/006371; Patent No: 7506563

11/5/09 ProStop Subtalar Arthroereisis Implant; Prosthesis for correction for flat foot deformity Designed with Arthrex and Concepts in Medicine; US Patent Application No: 2009/0276046; Patent awarded

11/16/10 Pneumatic Night Splint; Device and method for treating foot with adjustable bladder; Designed with Darco and Concepts in Medicine; US Patent Application No: 2007/0260164; Patent No: 7833184

12/24/09 Surgical Sutures; Incorporated with stem cells or other bioactive materials; Designed with Bioactive Surgical LLC; US patent No: 2009/0318962

1/13/10 Patch Augmentation of Achilles Tendon Repair; Designed with Tornier; US Patent Application No: 61/144332;

5/20/10 Transplug; Therapeutic materials delivery system for tissue voids and cannulated implants; Designed with Bioactive Surgical Inc.; US Patent No: 2010/0125240

11/16/10 Patch Augmentation of Achilles Tendon Repair; Designed with Tornier; US Patent No: 2010/0179591

1/11/11 Prosthesis; Disigned with Vancelette, Lew Schon, Litke andTornier; Document No: D648027

7/2011 Device for Correcting Hallux Valgus; Designed with BoneFix; Patent Pending

7/3/12 Modular Blade-Rod Intermedullary Fixation Device; Designed with Concepts in Medicine; US Patent No: 8211107

4/4/13 Talonavicular Joint Prosthesis and its Method of Implantation; Designed with Concepts in Medicine VI, LLC; Application No: 10856791.8-1654; Patent No: PCT/US2010002429

4/19/13 Talonavicular Joint Prosthesis and its Method of Implantation; Designed with Concepts in Medicine VI, LLC; US Patent No: PCT/US2010002429

**Extramural Funding**

Grants:

CURRENT

2012-2013 Smith Nephew Endoscopy Fellowship Grant

$25,000

Role: PI:

2013-2014 Stem Cell Bearing Suture for Tendon/Ligament Reconstruction in Healing Impaired Patients Pre Clinical Grant Award

$500,000

Maryland Stem Cell Research Fund

Role: PI: 60%

2013-2014 Adipogenesis of Adipose Tissue Derived Stem Cells in Foot Fat Pad

American Orthopaedic Foot & Ankle Society

$20,000

Role: Co-PI

2013-2014 Arthrex Fellowship Grant

Arthrex

$30,000

Role: PI

2014 Omaga Fellowship Grant

$7,000

Role: PI

2014-2015 Application of Pulsed Low-Intensity Ultrasound for Prevention of Posttraumatic Osteoathritis

Bioventus

$12,000

Role: Co-PI

2014-2016 Enhancing the Revitalization and Incorporation of Bone Allograft with Circulating Mesenchymal Stem Cells

Maryland Stem Cell Research Fund

$223,779

Role: Co-PI

PREVIOUS

1990s The Immediate Postoperative Prosthesis for Below-Knee Amputees: Biomechanical and Prospective Studies

99-466 & 99-670

Aircast

$20,000/2 years

Role: PI: 60%; Notes: Unrestricted research grant. Published in Foot/Ankle Int.

1990s Efficacy of a New Pressure-Sensitive Alarm for Clinical Use in Orthopaedics

99-628

Aircast

$20,000

Role: PI: 20 %;

1998 Pneumatic Achilles Wrap

Aircast

$2,000

Role: PI: 60%; Notes: Poster presentation

1998-2001Peripheral Nerve Stimulator Prospective Study

IRB 1999-461/462

Medtronic

$60,000/3 years

Role: PI: 70%; Notes: Unrestricted research grant

1998-2002 Comparative Biomechanical Analysis of Fusion Techniques for Tibiocalcaneal Arthrodesis

AOFAS

$10,000

Role: PI: 30%; Notes: Grant award for research proposal. Published in Jour of Bone/ Joint Surg.

2000s Screw Pullout Study

DePuy

$8,000

Role: PI: 20%

9/20/00 Biomechanical Talonavicular Stability

Synthes

$5,000

PI: Jonathan Rosenfeld, M.D.; Role: 30%; Notes: Unrestricted research Grant. Winner of the Am Jour of Ortho a Synthes Sponsored Research Award 2006.

2000-2003 Comparison of Aircell-Lined and Foam-Lined Walking Braces in Managing Plantar

Neuropathic Foot Ulceration

Aircast

$24,000

Role: PI: 20%

2000 – 2005 Cytokine Induced Osteoclastic Bone Resorption in Charcot Arthropathy: An Immunohistochemical Study in Charcot Joints or Identification of Inflammatory Mediators Present in Neuropathic Joints

2000-382

University of Rochester

Material and shipping costs

Role: Co-investigator; PI:Judith Baumhauer, M.D.; 15%; Notes: Published by Baumhauer. Winner of the Goldner Research Award

1/8/04-1/5/06 Evaluation of the KMI MBA Arthroereisis Implant

2003-252

KMI

$20,500

Role: PI: 60%

8/05-1/06 Determination of the Loads Arthroeresis Plugs are Subjected to when Placed in the Sinus Tarsi

ORC 402

Arthrex

$10,150

Role: PI: Brent Parks, M.D.; 10%; Notes: Equipment cost

11/09/05 Blade Plate Compared to Locking Plate Fixation for Tibiotalocalcaneal Arthrodesis: A Biomechanical Study

ORC 0513

Synthes

$58,000

Role: PI:Marc Chodos, M.D.; 10%; Notes: Equipment

2/1/06 Cotton Osteotomy: A Comparison of Pressure and Angular Changes and Fixation Strength with Allograft or Plate Fixation

ORC 0515

Arthrex

$6,000

Role: PI: Alan League, M.D.; 10%; Notes: Equipment

5/1/06-5/1/07 Inflammatory Cytokine Expression Degenerative Tendinosis: Quantitative Description and Relation to Whole-Tendon Mechanical Stimuli

IRB 2005-154/ORC 0421

AOFAS

$10,000

Role: PI: 10%

2007 In-Vitro Response of Normal and Diseased Tenocytes to PDGF-BB

102N46321100

Biomimetic Therapeutics

$39,000

Role: PI: 20%

4/5/07 -5/1/08 Quantitative and Qualitative Description: Effects of Bone Marrow Derived Growth

Factors and Cytokines on Autogenous Mesenchymal Stem Cells of Various Aspiration Sites

IRB 2006-268

AOFAS

$10,000

Role: PI: 20%

2008-2010 Bone and Tendon Healing Mechanisms of Mesenchymal Stem Cells and Hematopoetic Progenitors Derived from Human Adult Bone Marrow

Maryland Stem Cell Research Fund

$115,000/ 2 years

Role: PI: Sergei Atamas, M.D., PhD, University of Maryland; 10%; Notes: Paper published: Courneya JP, Luzina IG, Zeller CB, Rasmussen JF, Bocharov A, **Schon LC**, Atamas SP. Interleukins 4 and 13 modulate gene expression and promote proliferation of primary human tenocytes. Fibrogenesis Tissue Repair. 2010;3:90.

2008-2010 Retrospective Review of 50 Cases for Safety and Efficacy: Bone Marrow Aspiration for Complex Foot and Ankle Cases

Biomet

$35,000-40,000

Role: PI: 40%

2009 High-Density Nanofilms for Orthopaedic Therapies

Maryland Nanobiotechnology Research and Industry Competition Grant, Maryland Technology Development Corporation (TEDCO) & Maryland Biotechnology Center, Department of Business and Economic Development (DBED)

$250,000

Role: Co-Investigator; PI: Margaret Thorpe; Notes: The objective is to create a device for isolation, concentration, and delivery of stem cells or other therapeutic cells in conjunction with metallic, synthetic, autogenous, allogenic, or xenographic implants.

2010 Metabolic Profiling and Cytokine Analysis of Synovial Fluid in Healthy and End-Stage Post-Traumatic Ankle Joints

OEF/AOFAS

$20,000

Role: Co- Investigator; PI: Samuel B. Adams, M.D.;

2010-2012 Fellowship Grant

Omega Grant

$30,000

Role: PI: 50%

Industry- Sponsored Studies:

CURRENT

2009-2013 A Prospective, Randomized, Controlled, Multi-Center, Pivotal Human Clinical Trial to Evaluate the Safety and Effectiveness of GEM OS1 Bone Graft Compared to Autologous Bone Graft as a Bone Regeneration Device in Foot and Ankle Fusions

Biomimetic Therapeutics

Role: PI: Notes: Funded study under contract based on per patient enrollment.

2009-2013 A Prospective, Randomized, Controlled, Multi-Center, Injectable Bone Graft

Biomimetic Therapeutics

PI: Role: Notes: Funded study under contract based on per patient enrollment.

2009-2013 Juvenile Particulate Cartilage Allograft Study: Multi-Center, Retrospective Studies

Zimmer Biologics

Role: PI: Notes: Funded study under contract based on per patient enrollment.

Intramural Funding:

PREVIOUS

1998-2002 Clinical Use of Pressure Alarm in Postoperative Patients

MedStar Research Institute

$13,000

Role: PI: 20%; Notes: Unrestricted Research Grant. A CORR study.

7/1/06-6/30/07 Inflammatory Cytokine Expression in Degenerative Tendinosis: Quantitative Description and Relation to Whole-Tendon Mechanical Stimuli

FY2007IRGA-26/ORC 0421/ IRB 2005-154

Medstar Research Institute

$35,000

Role: PI: 10%

7/1/06-6/30/07 Inflammatory Cytokine Expression in Degenerative Tendinosis: Quantitative Description and Relation to Whole-Tendon Mechanical Stimuli

FY2007IRGA-26/ORC 0421/ IRB 2005-154

Medstar Research Institute

$15,000

Role: PI:

Departmental Funded Studies:

PREVIOUS

9/20/00 Biomechanical Talonavicular Stability

ORC 9933

Union Memorial Hospital Orthopedic Research

$7,320

Role: PI: Jonathan Rosenfeld, M.D.; 30%; Notes: Published in the Am Jour of Ortho, 2005.

9/3/2003 A Subtalar Implant (arthroereisis) as Adjunct Treatment for Posterior Tibial Tendon Dysfunction: Short-Term Radio-Graphic Results

ORC 0305

Union Memorial Hospital Orthopedic Research

$1,000

Role: PI: Scott Van Aman, M.D.; 60%; Notes: Presented to the American Orthopaedic Foot and Ankle Society, July 2006.

11/19/03 Osteochondral Ankle Allograft Trans-Plantation: The State of the Art and Early Results of 12 Cases of Bipolar Osteochondral Shell Resurfacing of the Ankle Joint with a Custom Jig

ORC 307

Union Memorial Hospital Orthopedic Research

$500

Role: PI: Anand Vora, M.D.; 60 %

11/19/03 Pes Planus Deformity: A Cadaveric Model and Analysis of Surgical Correction

ORC 309

Union Memorial Hospital Orthopedic Research

$5,000

Role: PI: Anad Vora, M.D.; 15%; Notes: Presented to the American Orthopaedic Foot and Ankle Society, July 2004. Winner of the AOFAS Fellow Research Award. Submitted to the Jour of Bone/Joint Surg. Published in the Jour of Bone/Joint Surge in 2006.

5/12/04 Biomechanical Testing of Four Constructs for Tibiotalocalcaneal Fusion

ORC 316

Union Memorial Hospital Orthopedic Research

$2,000

Role: PI: Patrick O’Neill, M.D.; 15%; Notes: Published in Foot/Ankle Int, 7/07

7/1/04 Biomechanical Testing of Four Constructs for Tibiotalocalcaneal Fusion

ORC 316

Union Memorial Hospital Orthopedic Research

$2,000

Role: PI: Patrick O’Neill, M.D.; 15%; Notes: Published in Foot/Ankle Int, 7/07.

11/17/04 Correction of Acquired Flatfoot Deformity with Calcaneocuboid Distraction Fusion and First Metatarsal-Cuneiform Fusion: A Biomechanical Study

ORC 408

Union Memorial Hospital Orthopedic Research

$1100

Role: PI: Kevin Logel, M.D.; 15%; Notes: Submitted to Foot/Ankle Int, 6/06. Published in Foot/Ankle Int, 4/07.

11/17/04 Biomechanical Evaluation of Calcaneal Avulsion Fractures in a Cadaveric Model

Using Screws With and Without Anchors

ORC 409

Union Memorial Hospital Orthopedic Research

$3808

Role: PI: Adam Wilson, M.D.; 15%; Notes: Poster presentation at IFAC, 5/05. Submitted to Foot/Ankle Int.

05/4/05 Biomechanical Evaluation of a Circular Wire External Fixation Device Vs. a Retrograde Intramedullary Nail for TCC Arthrodesis

ORC 419

Union Memorial Hospital Orthopedic Research

$2700

Role: PI: Adam Wilson, M.D.; 15%

05/4/05 New Flatfoot Model

ORC 420

Union Memorial Hospital Orthopedic Research

$23,734

Role: PI: Brent Parks, McS; 10%

9/14/05 Evaluation of Sinus Tarsi Volume and Implant Movement with Simulated Weight Bearing in Subtalar Arthroereisis: A Bio-Mechanical and Computerized Tomography Assessment

ORC 0504

Union Memorial Hospital Orthopedic Research

$200

Role: PI: Scott Van Aman, M.D.; 10%; Notes: Presented at the AOFAS, 7/06.

9/14/05Gene Expression in Degenerative Tendinosis: Quantitative Description of Expression mRNA by Microarray Analysis

ORC 0507

Union Memorial Hospital Orthopedic Research

$4,500

Role: PI: 10%

11/9/05Ankle Fusion's Home Run Screw: A Cadaveric Study

ORC 0509

Union Memorial Hospital Orthopedic Research

$1,250Role: PI: Johns Keeling, M.D.; 10%;Notes:Published in Foot/Ankle Int, 5/07.

11/9/05 Blade Plate Compared to Locking Plate Fixation for Tibiotalocalcaneal Arthrodesis: A Biomechanical Study

ORC 0513

Union Memorial Hospital Orthopedic Research

$381.25

Role: PI: Marc Chodos, M.D.; 10%; Notes: Published in Foot/Ankle Intl, 5/07.

2/1/06Effects of Autologous Mesenchymal Stem Cells on Interpositional Bone Block Arthrodesis of the First Metatarsophalangeal Joint

ORC 0520

Union Memorial Hospital Orthopedic Research

Role: PI: Marc Chodos, M.D.; 10%

2/1/06Cotton Osteotomy: A Comparison of Pressure and Angular Changes and Fixation Strength with Allograft or Plate Fixation

ORC 0515

Union Memorial Hospital Orthopedic Research

$840

Role: PI: Alan League, M.D.; 10%

2/1/06Transarticular vs. Extra-Articular Ankle Stabilization: A Biomechanical and Anatomic Study

ORC 0516

Union Memorial Hospital Orthopedic Research

$504

Role: PI:Alan League, M.D.; 10%

2/1/06Comparisons of Fixation Stability and Angle Correction Capacity of the Modified Mau Osteotomy with Original Mau and Ludloff Metatarsal Osteotomies: A Biomechanical Study

ORC 0518

Union Memorial Hospital Orthopedic Research

$2,080

Role: PI: Su-Youing Bae, M.D, Ph.D; 10%

8/31/06 Tendon Allograft with Bioabsorbable Inerference Screws and One Suture-Endobutton Fixation of Ankle Distal Tibiofibular Syndesmosis Diastasis: A Cadaver Study

ORC 0609

Union Memorial Hospital Orthopedic Research

$3,500

Role: PI: Seung Han, M.D.; 10%

8/31/06 Proximal Medial Opening Wedge Osteotomy of the First Metatarsal Bone as Treatment of Hallux Valgus: Analysis of Metatarsal Head Movement after Proximal Metatarsal Opening Wedge Osteotomy Depending on the Orientation of the Osteotomy. A 3-D Digitizer Study with Sawbone Models of the First Metatarsal Bone and Chevron Osteotomy: A 3-D Digitizer Analysis of Metatarsal Head Movement in the Frontal and Transversal Plane Depending on the Orientation of the Osteotomy (determined with a guide wire) with Saw bone Models of the First Metatarsal.

ORC 0610

Union Memorial Hospital Orthopedic Research

$1,540

Role: PI: Florian Gruber, M.D.; 10%

11/15/06The Effects of Bupivicaine on Cultured Tenocytes

ORC 0618

Union Memorial Hospital Orthopedic Research

$3,600

Role: Specimen collection and project supervision; PI: Scherb, M.D.; 10%

8/06-10/06 Shockwave Effect on Cultured Tenocytes (Effect on Inflammatory Cytokines and MMPs)

ORC 0611/0621

Union Memorial Hospital Orthopedic Research

$900

Role: Specimen collection and project supervision; PI:Florian Gruber, M.D.; 10%

8/06-11/06Mechanical Response of the Lateral Ankle Ligaments after Modified Brostrom Procedure

ORC 0605

Union Memorial Hospital Orthopedic Research

$2,624

Role: Design study and supervision of techniques and data; PI: Kevin Kirk, M.D.; 20%

11/15/06Shockwave Effect on Cultured Tenocytes (Effect on Inflammatory Cytokines and MMPs)

ORC 0619

Union Memorial Hospital Orthopedic Research

$4,000

Role: PI: 60; Notes: On-going study

2/7/07 Effect of BMP-2 on Human Tenocyte - Preliminary Study

ORC 0623

Union Memorial Hospital Orthopedic Research

$4,050

Role: PI: 10%; Notes: On-going study

2/7/07Tendon Specific Responses to PDGF

ORC 0625

Union Memorial Hospital Orthopedic Research

$4,800

Role: PI: 10%

**Research Program Building/Leadership**

2002-present Founder and Director, Biomechanical Laboratory, Union Memorial Hospital

2005-present Founder and Director, Orthobiologics Laboratory, Union Memorial Hospital

2002-present Co-creater of Program Information Form (PIF), Union Memorial Hospital Foot and Ankle Fellowship for the Accreditation Council for Graduate Medical Education (ACGME ) Program Information Form, Two 5-year Accredidation

2007-present Co-creater of Program Information Form (PIF), Union Memorial Hospital Orthopedic Residency Foot and Ankle Devision for the Accreditation Council for Graduate Medical Education (ACGME) Program Information Form

EDUCATIONAL ACTIVITIES

**Educational Publications**

Books, Textbooks:

1. Zuckerman JD, **Schon LC**. Hip fractures. In Zuckerman JD, ed. Comprehensive Care of Orthopaedic Injuries in the Elderly. Baltimore, MD: Urban & Schwarzenberg; 1990:23-111.
2. **Schon LC**, Ouzounian TJ. The ankle. In: Jahss MH, (ed). Disorders of the Foot and Ankle. 2nd ed. Philadelphia, PA: WB Saunders; 1991:1417-1460.
3. **Schon LC**, Clanton TO, Baxter DE. Reconstruction for subtalar instability: A review. Foot/Ankle.1991; 11(5):319-325.
4. **Schon LC**. Heel pain. In: Mizel MS, Pfeffer GB, eds. Selected Biography of the Foot and Ankle with Commentary. Pack Ridge, IL: AAOS; 1992:203-215
5. Clanton TO, **Schon LC**. Athletic injuries to the soft tissues of the foot and ankle. In: Mann RA, Coughlin MJ, eds. Surgery of the Foot and Ankle. 6th ed. St. Louis, MI: Mosby- Year Book Inc; 1993:1095-1224.
6. **Schon LC**. Plantar fascia and Baxter's nerve release. In: Myerson M, ed. Current Therapy in Foot and Ankle Surgery. St. Louis, MI: Mosby Year Book Inc; 1993:177-182.
7. **Schon LC**. Tarsal tunnel release. In: Myerson M, ed. Current Therapy in Foot and Ankle Surgery. St. Louis, MI: Mosby Year Book Inc; 1993:173-176.
8. **Schon LC**. Plantar fasciitis/heel pain. In: Pfeffer GB, Frey CC, ed. Current Practice in Foot and Ankle Surgery. New York, NY: McGraw Hill Inc; 1993:243-261.
9. **Schon LC**, Baxter DE. Heel pain syndrome and entrapment neuropathies About the foot and ankle. In: Gould JS, ed. Operative Foot Surgery. Philadelphia, PA: WB Saunders Co; 1994:192-208.
10. Skalley TC, **Schon LC**. Rehabilitation following Arthrodesis in the foot and ankle. In: Sammarco GJ, ed. Rehabilitation of the Foot and Ankle. St. Louis, MI: Mosby- Year Book Inc; 1995:373-387.
11. **Schon LC**, Clanton TO. Chronic leg pain. In: Baxter DE, ed. The Foot and Ankle in Sports. St. Louis, MI: CV Mosby Co; 1995:265-283.
12. **Schon LC**, Miller SD, Weinfeld SB. The ankle and foot. In: O'Young B, Young MA, Steins SA, eds. Physical Medicine & Rehabilitation Secrets. Philadelphia, PA: Hanley & Belfus, Inc; 1997:295-301.
13. **Schon LC**, Easley Mark E, Lam PC, Anderson CD. The acquired midtarsus deformity classification system. Interobserver Reliability and Intraobserver Reproducibility. Mt Royal Printing Company; 1998.
14. Campbell JT, **Schon LC**. Foot and ankle trauma. In: Baratz ME, Watson AD, Imbriglia JE, eds. Orthopaedic Surgery: The Essentials. New York, NY: Thieme; 1999:591-613.
15. Sammarco VJ, **Schon LC**. Nerve injuries of the lateral leg and ankle. In: Pfeffer GB, ed. Chronic Ankle Pain in the Athlete. Rosemont, IL: AAOS (Monograph); 2000:71-84.
16. **Schon, LC**. Decision-making for the athlete: The leg, ankle, and foot in sports. In: Myerson MS, ed. Foot and Ankle Disorders. Philadelphia, PA: WB Saunders Co; 2000:1435-1476.
17. **Schon LC**, Easley ME. Chronic pain. In: Myerson MS, ed. Foot and Ankle Disorders. Philadelphia, PA: WB Saunders Co; 2000:851-881.
18. **Schon LC**, Anderson CD. Tendon injuries in acute ankle sprains. In: Nyska M, Mann G, eds. The Unstable Ankle. Champaign, IL: Human Kinetics; 2002:121-138.
19. **Schon LC**, Cohen I, Easley ME. Nerve problems of the foot and ankle. In: Fitzgerald RH, Jr., Kaufer H, Malkani Al, eds. Orthopaedics. 1st ed. St. Louis, MI: CV Mosby; 2002:1681-1698.
20. **Schon LC**, Myerson MS. Cuneiform-metatarsal arthrodesis for hallux valgus. In: Kitaoka HB, ed. Master Techniques in Orthopaedic Surgery: The Foot and Ankle. 2nd Ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2002:99-117.
21. Stroud CC, **Schon LC**. The ankle and foot: Anatomy, pathology, and diagnosis. In: O'Young B, Young MA, Stiens SA, eds. Physical Medicine and Rehabilitation Secrets. 2nd ed. Philadelphia, PA: Hanley & Belfus, Inc.; 2002:297-300.
22. Pinzur MS, Guedes de Souza Pinto MA, **Schon LC**, Smith DG. Controversies in amputation surgery. Instructional Course Lecture. Vol 52. 2003:445-451.
23. Marks RM, **Schon LC**, Mroczek KJ. The diabetic foot. In: Thordarson DB, ed. Foot and Ankle. Philadelphia, PA: Lippincott Williams & Wilkins; 2004:98-112.
24. **Schon LC**. Chronic midfoot Charcot rocker-bottom reconstruction. In: Nunley JA, Pfeffer GB, Sanders RW, Trepman E, eds. Advanced Reconstruction: Foot and Ankle. Rosemont, IL: American Association of Orthopaedic Surgeons; 2004: 411-416.
25. **Schon LC**, Haddad SL, Campbell JT. Examination and differential diagnosis of the foot and ankle for arthroscopic-endoscopic surgery. In: Guhl JF, Parisien JS, Boynton MD, eds. Foot and Ankle Arthroscopy. 3rd ed. New York, NY: Springer-Verlag; 2004:39-62.
26. **Schon LC**. Midfoot Charcot reconstruction: Chronic rockerbottom reconstruction. In: Nunley JA, Pfeffer GB, Sanders RW, Trepman E, eds. Advanced Reconstruction: Foot and Ankle. Rosemont, IL: American Association of Orthopaedic Surgeons; 2004:411-416.
27. **Schon LC**. Salvage of failed heel pain surgery. In: Nunley JA, Pfeffer GB, Sanders RW, Trepman E, eds. Advanced Reconstruction: Foot and Ankle, Rosemont, IL: American Association of Orthopaedic Surgeons; 2004:349-352.
28. Davies P, **Schon LC**. Peripheral nerve stimulation. In: Wallace MS, Staats PS, eds. Pain Medicine and Management: Just the Facts. New York, NY: McGraw-Hill, Health Professions Divisions; 2004:315-317.
29. **Schon LC**, Herbst SA. Tendon ruptures and lacerations. In: Calhoun JH, Laughlin RT, eds. Fractures of the Foot and Ankle: Diagnosis and Treatment of Injury and Disease. Boca Raton, FL: Taylor & Francis; 2005:319-344.
30. **Schon LC**, Mann RA. Diseases of the nerves. In: Coughlin MJ, Mann RA, Saltzman CL, eds. Surgery of the Foot and Ankle. 8th ed. Philadelphia, PA: Elsevier; 2007:613-685.
31. Coughlin MJ, **Schon LC**. Disorders of tendons. In: Coughlin MJ, Mann RA, Saltzman CL, eds. Surgery of the Foot and Ankle. 8th ed. Philadelphia, PA: Mosby; 2007:1149-1277.
32. **Schon LC**, Logel KJ. Rheumatoid arthritis and inflammatory disorders. In: DiGiovanni CW, Greisberg J, eds. Foot and Ankle: Core Knowledge in Orthopaedics. Philadelphia, PA: Elsevier; 2007:90-103.
33. Baxter D, **Schon LC**. Assessment and treatment of the elite athlete: Helpful hints and pertinent pearls. In: Porter DA, **Schon LC**, eds. Baxter’s The Foot and Ankle in Sports. 2nd ed. 2008:3-25.
34. **Schon LC**, Gruber F, Pfeffer GB. Plantar heel pain. In Porter DA, **Schon LC**, eds. Baxter’s The Foot and Ankle in Sports. 2nd ed. 2008:226-239.
35. Title CI, **Schon LC**. Achilles tendon disorders including tendinosis and tears. In: Porter DA, **Schon LC**, eds. Baxter’s The Foot and Ankle in Sports. 2nd ed. 2008:147-181.
36. **Schon LC**, Shatby M. What is the best treatment for a Charcot foot and ankle? In: Questions. Philadelphia, PA: Elsevier; 2008:494-499.
37. **Schon LC**, Shatby M. What is the best treatment for a Charcot foot and ankle? In: Wright JG, ed. Evidence-Based Orthopaedics: The Best Answers to Clinical Questions. Philadelphia, PA: Elsevier; 2009:494-499.
38. **Schon LC**, Bae S-Y. Charcot neuroarthropathy of the midfoot/hindfoot: Midfoot osteotomy and arthrodesis using internal fixation and external fixation. In: Pfeffer GB, Hintermann B, Frey C, Easley ME, Sands AK, eds. Operative Techniques: Foot and Ankle Surgery. Philadephia, PA: Saunders; 2010:217-235.
39. Allen PG, **Schon LC.** The ankle and foot. In: Hochberg MC, Silman AJ, Smolen JS, Weinblatt ME, Weisman MH, eds. Rheumatology. 5th ed. Mosby; 2010.
40. Nadaud JP, **Schon LC**. Chronic Charcot midfoot reconstruction. In: Tech of Foot/Ankle Surg. 2010; 9(3):123-33.
41. Parks JS, **Schon LC**. Adult flatfoot surgery. In: Saxena A, ed. International Advances in Foot and Ankle Surgery. New York, NY: Springer; 2011.
42. Carrino J, Machado A, **Schon LC**. Musculoskeletal clinical applications of stem cells: Stem cell labeling for delivery and tracking. Series in: Medical Physics and Biomedical Engineering. London; Institute of Physics Publishing; 2011.
43. **Schon LC**, Groth AT. Pes cavus. In: Hurwitz SR, Parekh SG, eds. Musculoskeletal Examination of the Foot and Ankle: Making the Complex Simple. Thorofare, NJ; 2012: 124-144.
44. Machado AJ, Carrino JA, **Schon LC**. Musculoskeletal clinical applications of stem cell. In: Kraitchman DL, Wu JC, eds. Stem Cell Labeling for Delivery and Tracking Using Non-invasive Imaging. CRC Press Taylor & Francis Group, LLC; 2012:405-424.
45. Oji D, **Schon LC**. The diabetic foot orthopaedic surgery essentials. In: Thordarson, ed. Foot and Ankle. Philadelphia, PA; Lippincott Williams & Wilkins; 2012.
46. Yan AY, Adams SB, **Schon LC**. Minimally invasive operative treatment of displaced intra-articular calcaneal fractures via the sinus tarsi approach. In: Bluman EM, Chiodo CP (eds). Minimally Invasive Surgery of the Foot and Ankle. Philadelphia, PA: Lippincott Williams & Wilkins; 2012.
47. Coughlin MJ, Schon LC. Disorders of the tendons. In: Coughlin MJ, Saltzman CL, Anderson RB, editors. Mann's Surgery of the Foot and Ankle. 9th ed. Philadelphia: Elsevier; 2013. p. 1188-291.
48. Schon LC, Adams SB, Jr. Lapidus procedure for hallux valgus deformity. In: Kitaoka HB, editor. Master Techniques in Orthopaedic Surgery: The Foot and Ankle. 3rd ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2013. p. 103-18.
49. Schon LC, Reed MA. Disorders of the nerves. In: Coughlin MJ, Saltzman CL, Anderson RB, editors. Mann's Surgery of the Foot and Ankle. 9th ed. Philadelphia: Elsevier; 2013. p. 621-84.

Non-Peer Reviewed Scientific Articles

1. **Schon LC**, Baxter DE, Clayton TO. Chronic exercise induced leg pain in active people: More than just shin splints. Physicians in Sports Medicine. 1992; 100.
2. **Schon LC**. Foot and ankle problems in dancers. Maryland Medical Journal. 1993; 42(3):267-269.
3. **Schon LC**. Preface for March 1999 issue. Foot Ankle Clin.1999;4.
4. **Schon LC**. Technique for application of the standard ACE Fischer foot and ankle frame. DePuy Ace Medical Company, 1999.
5. **Schon LC**. Technique for application of tibiocalcaneal ACE Fischer external fixator using the U-ring. DePuy Ace Medical Company, 1999.
6. **Schon LC**. Technique for application of the ACE Fisher fixator for complex reconstruction of the foot: The foot fixator. DePuy Ace Medical Company, 1999.
7. Raikin SM, **Schon LC**. Nerve injuries in athletes. Foot and Ankle: Sports Medicine Update 2001.
8. Adams SB,Yao JQ, **Schon LC**. Particulated juvenile articular cartilage allograft transplantation for osteochondral lesions of the talus. Tech of Foot/Ankle Surg, 2011.
9. Jia X, Peters PG, **Schon LC.** The use of platelet-rich plasma in the management of foot and ankle conditions. Op Tech in Sports Med. 2011; 19:177-184.

Other Media:

1. FDL tendon transfer with calcaneal slide, opening wedge and cotton osteotomies. In: Philbin T, ed. Surgical Techniques in Orthopaedics: Achilles Tendon Disorders [DVD-Video].
2. Chevron osteotomy. In: Campbell J, ed. Surgical Techniques in Orthopaedics: Hallux Valgus [DVD-Video].
3. The application of a ring fixator onto the foot for treatment of an infected Charcot rocker-bottom foot [video].
4. The application of a ring fixator onto the ankle for treatment of an infected Charcot ankle [video]
5. Recurrent interdigital neuroma release. In: Comprehensive Foot and Ankle Course [video]. 1996-1999.
6. Tarsal tunnel release [video]. Learnware; 1996.
7. Calcaneus fracture: Open reduction internal fixation. In: Comprehensive Foot and Ankle Course [video]. 1996-1999.
8. Physical exam of the lower extremity [video]. Learnware; 1997.
9. AIRLIMB: The next step [video]. Learnware; 1999.
10. New technique for PNS [video]. Centrimed; 2000.
11. Reconstructive surgery aids for prosthetics patients [interview]. O&P Business News 38-54; 09/00.
12. Achilles tendon reconstruction for insertional tendinopathy [video]. Learnware; 2001.
13. Subtalar arthrodesis after talus fracture video]. Centrimed; 2000.
14. Revision hindfoot fusion [video]. Centrimed; 2000.
15. Techniques in below knee amputation [video]. Reno, NV: Hanger Educational Fair; 2004.
16. Proximal cresentic osteotomy for hallux valgus [video].
17. Ludloff osteotomy for hallux valgus [video].
18. Distal closing wedge osteotomy for halux valgus [video]. 2006.
19. Akin osteotomy for hallux valgus [video]. 2006.
20. Calcaneal fracture open reduction internal fixation subtalar approach [video].
21. Faro FD, **Schon LC**. Hallux valgus. Orthopaedia – Online Collaborative Orthopaedic Knowledgebase, 2011. (Created 11/09/09. Last modified 01/26/11).
22. Title CI, **Schon LC**. Morton's neuroma. American Academy of Orthopedic Surgeons. Orthopaedic Knowledge Online, 2006 September 26 [cited 2007 Feb 1].
23. Metatarsal osteotomies for metetarsalgia [webinar]. AOFAS; November, 2012.

**Teaching**

Classroom Instruction:

2009-2014 Lectures for Biomedical Engineernig Students and Design Class Students at Johns Hopkins University undergraduate campus

1. The Lower Extremity Anatomy and Biomechanics class
2. Biomechanics and inventions Design class

2009-2013 Lectures for Anatomy and Knesiology Course at Goucher College undergraduate campus

* 1. Lower Extremity Musculoskeletal Perspective on Dance

2009-2013 Lectures for Didactic Dance Program at Towson Univeristy undergraduate campus

* 1. Lower Extremity Musculoskeletal Perspective on Dance

CME Instruction: \*Unless otherwise specified, role is lecturer

11/09/88 Anatomic reconstruction of the lateral ligaments of the ankle using plantaris tendon: The modified Kelikian procedure. AAOS Comprehensive Foot and Ankle Course; Chicago, IL

2/11/90 Neuropathies of the foot and ankle. AAOS Symposium on Injuries of the Foot and Ankle in Athletes; New Orleans, LA

4/90 Nerve entrapment about the foot and ankle in athletes. AAOS Course: Sports Injuries of the Foot and Ankle; Chicago, IL

4/90 Bunions in athletes. AAOS Course: Sports Injuries of the Foot and Ankle; Chicago, IL

3/10/91 Heel pain syndrome: Electrodiagnostic studies and double crush. HUMANA Award Paper. AAOS Annual Meeting; Anaheim, CA

07/91 The role of electrodiagnostic studies in evaluating heel pain. Symposium on Nerve Problems, American Orthopaedic Foot and Ankle Society; Boston, MA

2/92 The treatment of claw toes. Foot and Ankle Symposium for Orthopedic Nurses, AAOS; Washington, DC

5/15/92 Achilles tendinitis and plantar fasciitis. Sports Symposium, Union Memorial Hospital; Baltimore, MD

5/15/93 Plantar fasciitis. Current Concepts in Orthopaedics, Meeting of the Southern Orthopaedic Association; Baltimore, MD

11/13/93 Arthritis of the foot and ankle. Common Problems of the Legs and Feet: Advances in Care, Union Memorial Hospital; Baltimore, MD

7/93 Tibial nerve anatomic variations. Summer Meeting, American Orthopaedic Foot and Ankle Society; Ashville, NC

07/93 Revision tarsal tunnel surgery. Summer Meeting, American Orthopaedic Foot and Ankle Society; Ashville, NC

1/27/94 The rheumatoid foot. Maryland Society for the Rheumatic Diseases Meeting; Baltimore, MD

2/27/94 Subtalar instability. Winter Meeting, American Orthopaedic Foot and Ankle Society; New Orleans, LA

5/6/94 Anatomy and biomechanics of the foot and ankle. Heel pain and plantar fasciitis. Stress fractures and fifth metatarsal fractures. Spring Sports Symposium, Union Memorial Hospital; Baltimore, MD

5/20/94 Advances in rheumatoid arthritis surgery. Fourth Annual Conference, Southern Medical Association; Baltimore, MD

7/3/94 Tendon transfer combined with calcaneal osteotomy for the treatment of posterior tibial tendon insufficiency: A radiological investigation. Summer Meeting of the American Orthopaedic Foot and Ankle Society; Cour d’Alene, ID

2/22/95 Calcaneal bone graft: A new harvesting technique. Annual Specialty Day Meeting of the American Orthopaedic Foot and Ankle Society; Orlando, FL

4/1/95 Profile of the collegiate dancer: Results of the dance screening evaluation. A conference presented by the Committee on Medicine and the Performing Arts of the Medical & Chirurgical Faculty of Maryland; Baltimore, MD

5/4-7/95 Surgical techniques: Tarsal tunnel, plantar fasciitis recurrent Morton’s neuroma. Surgical Skills Course: American Academy of Orthopaedic Surgeons, Orthopaedic Learning Center Course; Chicago, IL

6/12-15/95 Arthrodesis of midfoot neuropathic deformity using a plantar plate. Annual Meeting, The Joint American and British/European Foot and Ankle Society (AOFAS/EFAS); Dublin, Ireland

11/95 Fusion of the hallux MTP joint. Comprehensive Foot & Ankle Course, AAOS; San Francisco, CA

1996 Plantar fascia release and FBLPN release (video). Foot & Ankle Surgical Hands-On Course;

1996 Tarsal tunnel release (video). Summer Institute; SanDiego, CA

2/23-25/96 Revision arthrodesis for the salvage of pseudoarthrosis of ankle fusions. AOFAS Scientific Program, Specialty Day at AAOS Annual Meeting; Atlanta, GA

* 1. Recurrent interdigital neuroma release (video). Comprehensive Foot & Ankle Course;

1996-1999 Calcaneus fracture: Open reduction internal fixation (video). Comprehensive Foot & Ankle Course;

6/27-30/96 Anatomic analysis of tibiocalcaneal intramedullary nailing. AOFAS Summer Meeting; Hilton Head, SC

6/27-30/96 Revision surgery for failed triple arthrodesis. Roger Mann Award Paper. AOFAS Summer Meeting; Hilton Head, SC

9/10-13/96 Tarsal tunnel release, plantar fascia release, and revision interdigital neuroma. AAOS Summer Institute; San Diego, CA

10/31/96 Chevron procedure: Basic technique and results. AAOS 9th Annual Comprehensive Foot and Ankle Course; Washington, DC

10/31/96 Examination of the foot and ankle. AAOS 9th Annual Comprehensive Foot and Ankle Course Washington, DC

11/01/96 Calcaneus fracture. AAOS 9th Annual Comprehensive Foot and Ankle Course; Washington, DC

11/02/97 Tarsal tunnel and other nerve entrapment syndromes. AAOS 9th Comprehensive Foot and Ankle Course; Washington, DC

2/13/97 A new neuroarthropathic midfoot fusion technique-biomechanical analysis and rationale (poster). AAOS 1997 Annual Meeting; San Francisco, CA

2/13/97 A new neuroarthropathic midfoot fusion technique-biomechanical analysis and rationale. AAOS 1997 Annual Meeting; San Francisco, CA

2/13/97 Radiograph classification of rocker-bottom feet. AAOS 1997 Annual Meeting; San Francisco, CA

2/14/97 Foot and ankle fracture management in the elderly. Instructional course lecture on geriatric trauma. AAOS 1997 Annual Meeting; San Francisco, CA

5/97 Physical examination of the lower extremity (video). Comprehensive Foot & Ankle Course;

5/97 How to juggle: A practical method. Maryland Orthopaedic Association 1997 Annual Scientific Meeting; Baltimore, MD

5/97 Mechanical comparison of biplanar proximal closing wedge osteotomy with plantar plate fixation vs. crescentic osteotomy with screw fixation for the correction of metatarsus primus varus. Maryland Orthopaedic Association 1997 Annual Scientific Meeting; Baltimore, MD

7/17/97 Histopathologic findings in autogenous saphenous vein graft wrapping for recurrent tarsal tunnel syndrome-a case report (poster). AOFAS 13th Annual Summer Meeting; Monterey, CA

7/17/97 Assessment and management of the rocker-bottom foot. The Roger Mann Award Paper AOFAS 13th Annual Summer Meeting; Monterey, CA

7/17/97 Biplanar proximal closing wedge osteotomy with plantar plate fixation in correction of metatarsus primus varus. AOFAS 13th Annual Summer Meeting, Monterey, CA

9/3/97 Treatment decision-making for hallux valgus: Osteotomy, arthroplasty, or arthrodesis. AAOS Summer Institute Course; Washington, DC

11/06/97 Chevron procedure and Akin basic technique and results. AAOS 10th Annual Comprehensive Foot and Ankle Course; Chicago, IL

11/8/97 Treatment of diabetic neuropathic arthropathy. AAOS 10th Annual Comprehensive Foot and Ankle Course; Chicago, IL

11/8/97 Tarsal tunnel and other nerve entrapment syndromes. AAOS 10th Annual Comprehensive Foot and Ankle Course; Chicago, IL

11/14/97 Transpedal multiplanar wedge osteotomies and fusion for complex midfoot and hindfoot deformities. Combined Meeting of the AOFAS and the Japanese Society for Surgery of the Foot; Waikoloa, Hawaii

11/15/97 The clinical and radiographic outcome of revision surgery for failed triple arthrodesis. Combined Meeting of the AOFAS and the Japanese Society for Surgery of the Foot; Waikoloa, Hawaii; 11/15/97)

03/20/98 Chronic Achilles tendon ruptures. Instructive Course Lecture AAOS Annual Meeting; New Orleans, LA

3/21/98 Bone block fusion for 1st MTP arthritis. AAOS Annual Meeting Specialty Day; New Orleans, LA

6/24-26/98 Charcot neuroarthropathy of the foot and ankle. AOFAS Summer Meeting; Boston, MA

6/24-28/98 Clinical outcome after primary triple arthrodesis. AOFAS Summer Meeting; Boston, MA

6/24-28/98 Peripheral nerve vein wrapping for intractable lower extremity pain. AOFAS Summer Meeting; Boston, MA

10/29/98 Chevron, Akin and Keller procedures for hallux valgus. AAOS 11th Annual Comprehensive Foot & Ankle Course; San Francisco, CA

10/29/98 Tarsal tunnel and other nerve syndromes. AAOS 11th Annual Comprehensive Foot & Ankle Course; San Francisco, CA

10/29/98 Calcaneal fractures: Surgical technique. AAOS 11th Annual Comprehensive Foot and Ankle Course; San Francisco, CA

10/29/98 Posterior tibial dysfunction. AAOS 11th Annual Comprehensive Foot & Ankle Course; San Francisco, CA

10/29/98 Achilles tendinitis. AAOS 11th Annual Comprehensive Foot & Ankle Course; San Francisco, CA

10/29/98 Treatment of diabetic ulcers and infections. AAOS 11th Annual Comprehensive Foot & Ankle Course; San Francisco, CA

2/4/99 Treatment of chronic Achilles tendon ruptures. Instructional course lecture, The 66th Annual AAOS Meeting; Anaheim-Orange County, CA

2/5/99 Isolated subtalar arthrodesis in adults. The 66th Annual AAOS Meeting; Anaheim-Orange County, CA

2/5/99 Subtalar bone block arthrodesis. The 66th Annual AAOS Meeting; Anaheim-Orange County, CA

2/5/99 The use of IPOP & EPOPs: The development of the Airlimb. Dinner Meeting Lecture, The 66th Annual AAOS Meeting; Anaheim-Orange County, CA

2/5/99 Clinical outcome after primary triple arthrodesis. The 66th Annual AAOS Meeting; Anaheim-Orange County, CA

2/6/99 The preliminary results of peripheral nerve stimulation. Evening presentation sponsored by Medtronic, The 66th Annual AAOS Meeting; Anaheim-Orange County, CA

2/7/99 Isolated subtalar arthrodesis in adults. AOFAS Specialty Day; Anaheim-Orange County, CA

2/8/99 Peripheral nerve stimulation (PNS) of chronic lower extremity neuralgia (video). The 66th Annual AAOS Meeting; Anaheim-Orange County, CA

7/9/99 Chronic foot pain surgical management. Chronic Pain Symposium, AOFAS Summer Meeting; San Juan, Puerto Rico

7/11/99 Surgical management of chronic lower extremity neuropathic pain. Retrospective Study of 147 cases. AOFAS Summer Meeting; San Juan, Puerto Rico

11/4-6/99Treatment of ulcers and infections. Comprehensive Foot & Ankle Course: Current Concepts and Practical Solutions, American Academy of Orthopaedic Surgeons; Tysons Corner, VA

11/4-6/99 Treatment of nerve dysfunction. Comprehensive Foot & Ankle Course: Current Concepts and Practical Solutions, American Academy of Orthopaedic Surgeons; Tysons Corner, VA

11/4-6/99 Treatment of Achilles tendinitis. Comprehensive Foot & Ankle Course: Current Concepts and Practical Solutions, American Academy of Orthopaedic Surgeons; Tysons Corner, VA

11/4-6/99 Calcaneal fracture ORIF (a new surgical video). Comprehensive Foot & Ankle Course: Current Concepts and Practical Solutions. American Academy of Orthopaedic Surgeons; Tysons Corner, VA

11/4-6/99 Treatment of adult acquired flat foot. Comprehensive Foot & Ankle Course: Current Concepts and Practical Solutions, American Academy of Orthopaedic Surgeons; Tysons Corner, VA

3/15-18/00 Complex osteotomies and arthrodesis of the hindfoot and ankle. Instructional course lecture AAOS 67th Annual Meeting; Orlando, FL

3/18/00 Arthrodesis of the fourth and fifth tarsometatarsal joints of the midfoot. AAOS 67th Annual Meeting; Orlando, FL

3/18/00 The pros and cons of early prosthetic management for transtibial amputees. Symposium AOPA meeting; San Diego, CA

4/8/00 A new fixation method for fibular fractures in elderly patients. The MOA 2000 Scientific Program (2nd Place MOA Award for Best Paper); Baltimore, MD

7/13-15/00 A prospective analysis for peripheral nerve stimulation for intractable lower extremity nerve pain. American Orthopaedic Foot and Ankle Society Meeting; Vail, CO

7/13-15/00 Update on plantar fasciitis. American Orthopaedic Foot and Ankle Society Meeting; Vail, CO

9/9/00 Charcot foot deformities: Midfoot reconstruction. 10th Annual Baltimore Limb Deformity Course, Kernan Hospital; Baltimore, MD

3/3/01Intramedullary versus blade plate fixation for tibiocalcaneal arthrodesis: A biomechanical investigation. AAOS 68th Annual Meeting; San Francisco, CA

3/3/01 Evaluation of a prefabricated pneumatic adjustable postoperative prosthesis and a rigid total contact prosthetic: A biomechanical assessment. AAOS 68th Annual Meeting; San Francisco, CA

3/3/01 A prospective clinical study of transtibial amputees using a prefabricated adjustable postoperative prosthesis and early controlled ambulation. AAOS 68th Annual Meeting; San Francisco, CA

3/3/01 Up close and personal: Common foot and ankle problems. Moderator and speaker, 68th Annual AAOS Meeting; San Francisco, CA

3/3/01 Osteotomies and arthrodesis of the hindfoot and ankle. Instructional course lecture, 68th Annual AAOS Meeting; San Francisco, CA

3/3/01 Chronic Achilles tendon reconstruction. Instructional course lecture, 68th Annual AAOS Meeting; San Francisco, CA

5/4/01 Subluxation/dislocation of the MTP: MTP Resection (DuVries) vs. metatarsal osteotomy LODMO (Weil) (videos). AAOS Orthopaedic Learning Center Course; Rosemont, IL

5/4/01 Midfoot salvage for Charcot (video). AAOS Orthopaedic Learning Center Course; Rosemont, IL

5/4/01 Subluxation/dislocation of the MTP: Resection (DuVries) vs. LODMO (Weil). AAOS Orthopaedic Learning Center; Rosemont, IL

5/4/01 Midfoot salvage for Charcot. AAOS Orthopaedic Learning Center; Rosemont, IL

7/19/01 The surgical approach to the geriatric ankle. Symposium on the Aging Foot, 17th Annual AOFAS Summer Meeting; San Diego, CA

7/19/01 Extensor digitorum brevis muscle pedicle bone graft. 17th Annual AOFAS Summer Meeting; San Diego, CA

11/7/01 Surgery for chronic Achilles tendon injuries: Two techniques (video). AAOS and AOFAS, Comprehensive Foot and Ankle: Current Concepts and Practical Solutions; Marco Island, FL

11/9/01 Evaluation and treatment of tarsal tunnel syndrome (video). American Academy of Orthopaedic Surgeons and the American Orthopaedic Foot and Ankle Society, Comprehensive Foot and Ankle: Current Concepts and Practical Solutions; Marco Island, FL

11/09/01 Pilon, calcaneal, talar, Lisfranc injuries. American Academy of Orthopaedic Surgeons and the American Orthopaedic Foot and Ankle Society, Comprehensive Foot and Ankle: Current Concepts and Practical Solutions; Marco Island, FL

11/10/01 Tarsal tunnel. American Academy of Orthopaedic Surgeons and the American Orthopaedic Foot and Ankle Society, Comprehensive Foot and Ankle: Current Concepts and Practical Solutions; Marco Island, FL

11/10/01 Ulcers and amputations. American Academy of Orthopaedic Surgeons and the American Orthopaedic Foot and Ankle Society, Comprehensive Foot and Ankle: Current Concepts and Practical Solutions; Marco Island, FL

11/10/01 Diabetic foot. American Academy of Orthopaedic Surgeons and the American Orthopaedic Foot and Ankle Society. Comprehensive Foot and Ankle: Current Concepts and Practical Solutions; Marco Island, FL

11/10/01Hallux valgus correction with proximal osteotomies: Techniques, results (video). American Academy of Orthopaedic Surgeons and the American Orthopaedic Foot and Ankle Society. Comprehensive Foot and Ankle: Current Concepts and Practical Solutions; Marco Island, FL

2/13/02 Controversies in lower extremity amputation. Instructional course lecture, AAOS 69th Annual Meeting; Dallas, TX

2/14/02 A critical review of the Ludloff osteotomy for correction of adult hallux valgus. American Academy of Orthopaedic Surgeons, 69th Annual Meeting, Dallas, TX

2/16/02 A critical review of the Ludloff osteotomy for correction of adult hallux valgus. American Academy of Orthopaedic Surgeons, 69th Annual Meeting, Dallas, TX

2/17/02 Osteotomies for primary and revision foot and ankle alignment disorders. Instructional course lecture, AAOS 69th Annual Meeting; Dallas, TX

3/21/02 The turn down procedure for Achilles tendinitis. American Academy of Orthopaedic Surgeons OLC Course; Rosemont, IL

3/21/02 Application of a ring external fixation of the foot and ankle. American Academy of Orthopaedic Surgeons OLC Course, Rosemont, IL

3/21/02 The Ludloff Osteotomy (video). American Academy of Orthopaedic Surgeons OLC Course; Rosemont, IL

3/21/02 The Lapidus procedure for severe hallux valgus correction (video). American Academy of Orthopaedic Surgeons OLC Course; Rosemont, IL

3/22/02 Severe hallux valgus treatment with the Lapidus procedure. American Academy of Orthopaedic Surgeons OLC Course; Rosemont, IL

3/22/02 Application of Tibiocalcaneal External Fixator. Videotaped surgical demonstration, American Academy of Orthopaedic Surgeons OLC Course; Rosemont, IL

3/22/02 Turndown procedure for chronic Achilles tendon rupture. Videotaped surgical demonstration, American Academy of Orthopaedic Surgeons OLC Course; Rosemont, IL

7/12/02 Midfoot and hindfoot Charcot deformities: The role of fusion. Diabetic Symposium, AOFAS 18th Annual Summer Meeting; Traverse City, MI

7/12/02 CRPS: Early, effective triage. American Orthopaedic Foot and Ankle Society 2002 Summer Meeting; Traverse City, MI

7/13/02 Celebrating Our Own – Mondays with Mel Jahss, MD. AOFAS 18th Annual Summer Meeting; Traverse City, MI

7/13/02 Preliminary results with a pre-fabricated immediate postoperative prosthetic limb system for lower extremity amputees. AOFAS 18th Annual Summer Meeting; Traverse City, MI

7/13/02 Outcome following transtibial amputation modified with a distal tibio-fibular synostosis. AOFAS 18th Annual Summer Meeting; Traverse City, MI

12/6/02 Diabetes: Management of infections and amputations (no Charcot). Foot and Ankle: Current Concepts and Practical Solutions, AAOS; Washington, DC

12/6/02 Evaluation and treatment alternatives of tarsal tunnel syndrome (video). Foot and Ankle: Current Concepts and Practical Solutions, American Academy Orthopaedic Surgeons; Washington, DC

2/7/03 Advances in prosthetics (scientific exhibit). American Academy of Orthopaedic Surgeons, 70th Annual Meeting; New Orleans, LA

2/7/03 Controversies In lower extremity amputation. Instructional course lecture, AAOS 70th Annual Meeting; New Orleans, LA

2/7/03 Osteotomies for primary and revision foot and ankle alignment disorders. Instructional course lecture, AAOS 70th Annual Meeting; New Orleans, LA

2/7/03 The diabetic foot. Instructional course lecture, AAOS 70th Annual Meeting;New Orleans, LA

2/7/03 Treatment of Charcot foot and ankle. Instructional course lecture, AAOS 70th Annual Meeting; New Orleans, LA

2/7/03 Osteotomies of the midfoot and hindfoot. Instructional course lecture, AAOS 70th Annual Meeting; New Orleans, LA

2/7/03 Advances in postoperative management for transtibial amputations. Instructional course lecture, AAOS 70th Annual Meeting; New Orleans, LA

6/27/03The effect of different geometric configurations of the Weil osteotomy on plantar pressure in an in vitro cadaver model. AOFAS 19th Annual Summer Meeting; Hilton Head, SC

6/27/03 Identification of the spectrum of surgical treatments for idiopathic osteoarthritis of the tarsometatarsal (TMT) joints and the clinical outcomes. AOFAS 19th Annual Summer Meeting; Hilton Head, SC

6/27/03 The preliminary results of an internet survey determining the commonly used ankle scores. AOFAS 19th Annual Summer Meeting; Hilton Head, SC

10/4/03 A retrospective analysis of using implantable DC bone stimulators in high risk and revision foot and ankle surgery. 58th Annual Meeting of the Canadian Orthopaedic Association; Winnipeg, MB

10/4/03 The preliminary results of an Internet survey determining the commonly used ankle scores by AOFAS members. 58th Annual Meeting of the Canadian Orthopaedic Association; Winnipeg, MB

10/4/03 The effect of different geometric configurations of the Weil osteotomy on plantar pressure in an in vitro cadaver model. 58th Annual Meeting of the Canadian Orthopaedic Association; Winnipeg, MB

10/10/03Lesser ray problems. Foot and Ankle: Trauma, Reconstruction and Sports-Controversies in Treatment; San Francisco, CA

10/10/13 Acute sports trauma. Foot and Ankle: Trauma, Reconstruction and Sports-Controversies in Treatment; San Francisco, CA

10/11/03 Charcot problems. Foot and Ankle: Trauma, Reconstruction and Sports-Controversies in Treatment; San Francisco, CA

10/11/03 Flexible deformities. Foot and Ankle: Trauma, Reconstruction and Sports-Controversies in Treatment; San Francisco, CA

3/10/04 Controversies in lower extremity amputation. AAOS 71st Annual Meeting; San Francisco, CA

3/11/04Update on tendon injuries of the foot and anklE. AAOS 71st Annual Meeting; San Francisco, CA

3/13/04 The effect of first metatarsal shortening and dorsiflexion osteotomies on the forefoot plantar pressure in a cadaveric model. AAOS 71st Annual Meeting, Specialty Day Presentation; San Francisco, CA

4/15/04 Surgical treatment of diabetic foot and ankle disorders. Update on Diabetes XXVII Seminar, Union Memorial Hospital; Baltimore, MD

4/23/04Salvage of the failed tarsal tunnel release (is re-operation indicated, how to prevent failures). Advanced Foot & Ankle Course; Baltimore, MD

4/23/04 Management of the Charcot deformity. Advanced Foot & Ankle Course; Baltimore, MD

4/23/04 Advances in lower extremity amputation. Advanced Foot & Ankle Course; Baltimore, MD

4/24/04 Emerging “joint sparing” techniques for the treatment of ankle arthritis in the young patient. Advanced Foot & Ankle Course; Baltimore, MD

6/19/04 Differential practice of treating ankle arthritis in a general and specialty orthopaedic society. 2nd Annual Canadian Orthopaedic Foot and Ankle Society Specialty Day; Calgary, AB

7/29-31/04 Cytokine induced osteoclastic bone resorption in Charcot arthropathy: An immunohistochemical study. 20th Annual AOFAS Summer Meeting; Seattle WA

7/29-31/04 The effect of tibio-talar joint Arthrodesis on the adjacent tarsal joint pressure (talo-navicular, subtalar, calcaneo-cuboid joints) in a cadaveric model. 20th Annual AOFAS Summer Meeting; Seattle, WA

7/29-31/04 Spectrum of flexible adult flatfoot deformity: Correction with medializing calcaneal osteotomy and flexor digitorum longus transfer with subtalar arthroereisis. 20th Annual AOFAS Summer Meeting; Seattle, WA

7/29-31/04 Changes in forefoot loading after lateral column lengthening: A cadaveric study comparing the Evans and the calcaneocuboid fusion techniques. 20th Annual AOFAS Summer Meeting; Seattle, WA

7/29-31/04 Flexible adult flatfoot deformity: Mild and severe deformity experimental model. 20th Annual AOFAS Summer Meeting; Seattle, WA

7/29-31/04 The peroneal groove deepening procedure: A biomechanical study of pressure reduction. 20th Annual AOFAS Summer Meeting (selected best poster from COMSS); Seattle, WA

9/4/04 Neuropathic nonunions: Internal fixation. Nonunions: Advances and Controversies Pre-Course Symposium, Paley Limb Lengthening Course; Baltimore, MD

11/12/04 Dance injuries: Prevention, diagnosis and management with patient demonstrations. The Performing Arts Medicine Committee of MedChi, the Maryland State Medical Society; Baltimore, MD

11/12/04The developing foot and ankle in dancers. Med Chi Annual Performance Arts and Medicine Meeting; Baltimore, MD

2/23-26/05 Radiographic and pedobarographic evaluation of Evans lateral column lengthening and medial cuneiform osteotomy: A biomechanical study. 35th AOFAS Winter Meeting; Washington, DC

2/23-26/05 Why did my bunion correction fail, and how do I fix it? Co-moderator, 35th AOFAS Winter Meeting; Washington, DC

2/23-26/05 Biomechanical testing of four constructs for tibiotalocalcaneal fusion. 35th AOFAS Winter Meeting; Washington, DC

2/23-26/05 Osteochondral ankle allograft transplantation: The state of the art of early results of 12 cases of bipolar osteochondral shell resurfacing of the ankle joint with a custom jig. AAOS 72nd Annual Winter Meeting; Washington, DC

2/23-26/05 The peroneal groove deepening procedure: A biomechanical study of pressure reduction. (Poster). AAOS 72nd Annual Winter Meeting; Washington, DC

2/23-26/05 Flexible flatfoot deformity: Mild and severe deformity experimental model (Poster). AAOS 72nd Annual Winter Meeting; Washington, DC

10/6/05 Open reduction and internal fixation. Symposium on Foot and Ankle Charcot arthropathy: Treatment dilemmas, 36th Annual Meeting, Eastern Orthopaedic Association; Cambridge, MD

2/3/06 Distal osteotomies/Akin lecture and video. Bunions and lesser toes. AAOS Advanced Techniques in Foot and Ankle Surgery, OLC; Rosemont, IL

2/3/06 Plantar fasciitis/Tarsal tunnel release lecture and video. Nerves. AAOS Advanced Techniques in Foot and Ankle Surgery, OLC; Rosemont, IL

3/25/06 Calcaneocuboid distraction arthrodesis and first metatarsal-cuneiform arthrodesis for correction of a flexible flatfoot deformity in a cadaveric model. Contributing author, AOFAS 36th Annual Winter Meeting; Chicago, IL

3/25/06 Symposium II: Truth or consequences: An interactive symposium on surgical decision making. Moderator, AOFAS 36th Annual Winter Meeting; Chicago, IL

4/6/06 Salvaging the diabetic foot. Update on Diabetes XXVIV, Union Memorial Hospital; Baltimore, MD

4/27-29/06 Ankle DJD – Joint “Sparing”. Moderator, Advanced Foot and Ankle Course; Atlanta, GA

4/27-29/06 Complications of treatment of foot and ankle problems: Why it happened/how I managed it. Panelist midfoot/hindfoot case. Advanced Foot and Ankle Course; Atlanta, GA

4/27-29/06 Bunionettes: Why aren’t they all easy? Lesser Toe Problems Session, Advanced Foot and Ankle Course; Atlanta, GA

4/27-29/06 The case not to fuse. First MTC: To fuse or not to fuse? Advanced Foot and Ankle Course; Atlanta, GA

4/27-29/06 Entrapment neuropathies. Neurological problems session. Advanced Foot and Ankle Course; Atlanta, GA

2/14/07 Thinking deeper inside and outside the box. Instructional course: Emerging Methods for Treating Ankle Arthritis, 2007 AAOS Annual Meeting; San Diego, CA

4/21/07 Weil metatarsal osteotomy. The Latest Techniques in Foot and Ankle Surgery. Practical Anatomy and Surgical Education, Saint Louis University; St. Louis, MO

4/21/07 Girdlestone Taylor flexor – extensor transfer. Weil metatarsal osteotomy. The Latest Techniques in Foot and Ankle Surgery. Practical Anatomy and Surgical Education, Saint Louis University; St. Louis, MO

4/21/07 Collateral ligament reconstruction. Weil metatarsal osteotomy. The Latest Techniques in Foot and Ankle Surgery. Practical Anatomy and Surgical Education, Saint Louis University; St. Louis, MO

7/12/07 Diabetic midfoot collapse. 23rd Annual Summer Meeting of the American Orthopaedic Foot & Ankle Society; Toronto, Ontario, Canada

7/14/07Symposium: From Imus to Oprah to Katie: Tips for interaction between media and orthopaedist. 23rd Annual Summer Meeting of the American Orthopaedic Foot & Ankle Society; Toronto, Ontario, Canad

3/5/08 Thinking deeper inside and outside the box. Instructional course: Emerging Methods for Treating Ankle Arthritis. AAOS Annual Meeting; San Francisco, CA

4/12/08Advances in pes planus reconstruction: Extra-articular correction and arthroereisis. Keynote Speaker, The 8th Biennial Canadian Orthopaedic Foot & Ankle Symposium; Toronto, Ontario

4/12/08 Advances in Charcot ankle/hindfoot/midfoot reconstruction: Internal and external fixation. The 8th Biennial Canadian Orthopaedic Foot & Ankle Symposium, Toronto, Ontario

4/13/08 Management of acute diabetic and Charcot midfoot and hindfoot fractures. The 8th Biennial Canadian Orthopaedic Foot & Ankle Symposium; Toronto, Ontario

5/1/08 Arthroereisis. Advanced Foot and Ankle Course: Reconstruction and Salvage of Complications; San Francisco, CA

5/2/08 Bone healing adjuncts. Advanced Foot and Ankle Course: Reconstruction and Salvage of Complications; San Francisco, CA

5/2/08 Charcot midfoot reconstruction: When to use plates or external fixation. Advanced Foot and Ankle Course: Reconstruction and Salvage of Complications; San Francisco, CA

5/9/08 Supramalleolar osteotomy. The Latest Techniques in Foot and Ankle Surgery. Practical Anatomy & Surgical Education, Saint Louis University; St. Louis, MO

5/10/08 Plantar neuroma resection. The Latest Techniques in Foot and Ankle Surgery. Practical Anatomy & Surgical Education, Saint Louis University; St. Louis, MO

5/10/08 Weil metatarsal osteotomy. The Latest Techniques in Foot and Ankle Surgery. Practical Anatomy & Surgical Education, Saint Louis University; St. Louis, MO

5/10/08 Girdlestone Taylor flexor-extensor transfer. The Latest Techniques in Foot and Ankle Surgery. Practical Anatomy & Surgical Education, Saint Louis University; St. Louis, MO

5/10/08 Collateral ligament reconstruction. The Latest Techniques in Foot and Ankle Surgery. Practical Anatomy & Surgical Education, Saint Louis University; St. Louis, MO

6/27/08 Elongation of anterior talofibular ligament with range of motion after modified Brostrom procedure: A biomechanical investigation. Presented by Dr. KL Kirk at the Annual Summer Meeting of the AOFAS; Denver, CO

6/28/08 The effect of extracorporeal shock wave therapy on cultured tenocytes. Presented by Dr. SH Han at the Annual Summer Meeting of the AOFAS; Denver, CO

9/4/08 Children’s sports injuries in the foot. Pediatric Foot Deformities. 18th Annual Baltimore Limb Deformity Post-Course; Baltimore, MD

9/4/08 Pediatric hallux valgus: Orthopaedic perspective. Pediatric Foot Deformities. 18th Annual Baltimore Limb Deformity Post-Course; Baltimore, MD

9/4/08 Pediatric flatfoot: Arthroereisis from an orthopaedic perspective. Pediatric Foot Deformities. 18th Annual Baltimore Limb Deformity Post-Course; Baltimore, MD

9/4/08 Osteochondroses: The child’s foot. Pediatric Foot Deformities. 18th Annual Baltimore Limb Deformity Post-Course; Baltimore, MD

6/12/09 The latest techniques in foot and ankle surgery: A hands-on cadaver workshop. Co-Course Director, Practical Anatomy & Surgical Education, Saint Louis University; St. Louis, MO

10/4/10 Bone marrow stem cells heal tendon via secreted factors. World Stem Cell Summit in collaboration with the University of Maryland School of Medicine; Detroit, MI

10/5/10 Development and in vitro analysis of novel human mesenchymal stem cell delivery textile scaffolds for Achilles tendon repair. World Stem Cell Summit in collaboration with the University Of Maryland School Of Medicine; Detroit, MI

7/7/10 American Orthopaedic Foot & Ankle Society 2010 Summer Meeting; National Harbor Washington, DC

7/13/11 The Treatment of Foot & Ankle Trauma American Orthopaedic Foot & Ankle Society 2011 Pre-Meeting Course; Keystone, CO

4/22/10Diabetes Case Presentations. Moderator, AOFAS Advanced Course; Philadelphia, PA

4/23/10 External Fixators in Trauma. AOFAS Advanced Course; Philadelphia, PA

4/24/10 Second MTP Instability. AOFAS Advanced Course; Philadelphia, PA

2/15/11 Surgical treatment of hallux rigidus. Fab five of the foot and ankle. AAOS Instructional Course, Annual Meeting of the AAOS; San Diego, CA

2/16/11 Bunionettes. Fab five of the foot and ankle. AAOS Instructional Course, Annual Meeting of the AAOS; San Diego, CA

2/17/11 Faro FD, Guyton GP, Parks BG, Schon LC, Toner M, Vora AM, et al. The treatment of Achilles tendinopathy with tendon debridement and flexor hallucis longus transfer. Annual Meeting of the AAOS; San Diego, CA

2/19/11 Ortho-mations: How to make cool and educational animations for bone-fixing folks. AOFAS Specialty Day; San Diego, CA

5/12/11 Tunnel vision or my delusion. Can I even treat a recurrent tarsal tunnel syndrome? Nerve Issues. AOFAS Surgical Complications of the Foot and Ankle; Baltimore, MD

5/12/11 I wanted a lesser procedure, but makin the Akin a total failure. Hallux Valgus. AOFAS Surgical Complications of the Foot and Ankle; Baltimore, MD

5/13/11 How I correct a valgus malunion after a triple arthrodesis. Two-minute technique tip. AOFAS Surgical Complications of the Foot and Ankle; Baltimore, MD

5/13/11 Taking out the tarsal coalition was easy, but now the foot is even flatter. What now? The Diabetic Foot and Ankle. AOFAS Surgical Complications of the Foot and Ankle; Baltimore, MD

5/13/11 This rocker bottom deformity is wild. Perhaps I should use an external fixator. The Diabetic Foot and Ankle. AOFAS Surgical Complications of the Foot and Ankle; Baltimore, MD

5/13/11 Complication Cases: 5th metatarsal stress fracture. A recurrent navicular stress fracture. They missed a turf toe injury. This Lisfranc injury is now 7 weeks out. Malunion talus fracture. Malunion and non union of a calcaneus. Trauma. AOFAS Surgical Complications of the Foot and Ankle; Baltimore, MD

5/13/11 What plate do I use for a middle column arthrodesis. The Midfoot. AOFAS Surgical Complications of the Foot and Ankle; Baltimore, MD

5/13/11 How I fix the bunionette. Lesser toes. AOFAS Surgical Complications of the Foot and Ankle; Baltimore, MD

5/13/11 Her toes stick up in the air. What is it about this Weil osteotomy? Lesser toes. AOFAS Surgical Complications of the Foot and Ankle; Baltimore, MD

5/14/11 My favorite modification of the Brostrom. Two-minute technique tip. AOFAS Surgical Complications of the Foot and Ankle; Baltimore, MD

5/14/11 She wants to go back to playing volleyball, after I did her Brostrom repair, but the heel is in varus. Should I have done a calacneal osteotomy? Two-minute technique tip. AOFAS Surgical Complications of the Foot and Ankle; Baltimore, MD

7/14/11 Peters P, **Schon LC**, Parks B. Distal tibia plafondplasty for talar dome osteochondral lesion exposure. AOFAS Summer Meeting; Keystone, CO

7/14/11 Miller, SD, **Schon LC.** A new technique: Arthroscopic filling of talar osteochondral defects with stem cell-rich collagen paste. AOFAS Summer Meeting; Keystone, CO

7/14/11 **Schon LC**, Oji D, Guyton G. Retrospective review of the treatment of talar chondral lesions with particulated juvenile cartilage allograft. AOFAS Summer Meeting; Keystone, CO

2/8/12 Surgical treatment of hallux rigidus. Fab five of the foot and ankle. AAOS Instructional Course, Annual Meeting of the AAOS; San Francisco, CA

2/9/12 Bunionettes. Fab five of the foot and ankle. AAOS Instructional Course, Annual Meeting of the AAOS; San Francisco, CA

4/20/12 Advances in Achilles tendon disorders and treatment. Canadian Orthopaedic Foot and Ankle Symposium; Toronto, Ontario

4/21/12 Advances in management of the adult progressive flat foot deformity. Canadian Orthopaedic Foot and Ankle Symposium; Toronto, Ontario

5/3/12 Charcot reconstruction: Ring fixator. AOFAS Advanced Foot and Ankle Course: Reconstruction and Salvage of Complications; Chicago, IL

5/4/12 Second MTP overload / dislocation. AOFAS Advanced Foot and Ankle Course: Reconstruction and Salvage of Complications; Chicago, IL

5/5/12 Arthroereisis. Advanced Foot and Ankle Course: AOFAS Advanced Foot and Ankle Course: Reconstruction and Salvage of Complications; Chicago, IL

6/21/12 Use of allograft chondrocyte implantation for talus OCD. AOFAS Summer Meeting; San Diego, CA

6/22/13 The effect of the dorsal opening wedge (Cotton) osteotomy as a combined procedure for acquired flat foot deformity. AOFAS Summer Meeting; San Diego, CA

6/23/12 Stem cell bearing sutures improve Achilles tendon healing and repair strength in a rat model. AOFAS Summer Meeting; San Diego, CA

6/23/12 Computed tomography analysis of third webspace injections for interdigital neuroma. AOFAS Summer Meeting; San Diego, CA

11/29/12 Dislocating peroneal tendons: Stop the snapping! AOFAS/AAOS International Course; Orlando, FL

11/29/12 Medial foot pain: Insertional anterior tibial tendon problems. AOFAS/AAOS International Course; Orlando, FL

12/1/12 Lesser toe mania: Toes gone wild. Discussion. AOFAS/AAOS International Course; Orlando, FL

12/1/12 Biomechanical assessment of flatfoot correction techniques in a cadaver model**.** AOFAS/AAOS International Course; Orlando, FL

12/13/12 Advances in reconstruction of ankles and heels. SOMOS 54th Annual Meeting; Naples, FL

3/19/13 Pes planovalgus: From adolescent to adulthood. AAOS 2013 Annual Meeting; Chicago, IL

3/19/13 Fab five of the foot and ankle. AAOS 2013 Annual Meeting; Chicago, IL

5/16/13 Advances in treating the Achilles and posterior tibial tendon disorders. 24th Annual Southeastern Foot Club; Point Clear, AL

5/16/13 Ankle reconstructions via lateral approach: Autograft, allograft and arthroscopy. 24th Annual Southeastern Foot Club; Point Clear, AL

5/17/13 Diabetes: Midfoot Charcot, Moderator. AOFAS Surgical Complications Course; Durham, NC

5/17/13 Case presentation and Audience Q&A, Moderator. AOFAS Surgical Complications Course; Durham, NC

5/17/13 Lack of active dorsiflexion after posterior tibial tendon transfor. AOFAS Surgical Complications Course; Durham, NC

5/18/13 Chronic pain from the orthopaedic standpoint: US perspective. AOFAS Surgical Complications Course; Durham, NC

5/18/13 Failed reconstruction of tibialis anterior tendon: Perspective I. AOFAS Surgical Complications Course; Durham, NC

7/19/13 Hardware from hell: Tricks on getting it all out. 2013 AOFAS Annual Summer Meeting; Hollywood, FL

10/18/13 Forefoot problems in the athlete: Operative treatment. AOFAS Sports Injuries of the Foot and Ankle Course: Houston, TX

10/18/13 Plantar plate injuries and 2nd MTP synovitis. AOFAS Sports Injuries of the Foot and Ankle Course: Houston, TX

10/19/13 Surgical treatment of non-insertional Achilles tendinitis. AOFAS Sports Injuries of the Foot and Ankle Course: Houston, TX

10/19/13 Reconstruction of the chronic syndesmosis injury. AOFAS Sports Injuries of the Foot and Ankle Course: Houston, TX

10/19/13 Nerve compression syndromes in athletes- diagnosis and treatment. AOFAS Sports Injuries of the Foot and Ankle Course: Houston, TX

2/20/14 Total ankle arthroplasty, Moderator. AAOS/AOFAS Total Ankle Arthroplasty Course #3638; Orthopaedic Learning Center, Rosemont, IL

2/20/14 Panel Discussion and Questions, Moderator. . AAOS/AOFAS Total Ankle Arthroplasty #3638; Orthopaedic Learning Center, Rosemont, IL

2/22/14 Video demonstration, Case discussions, Hands on Mentoring in Ankle Replacement Implantation. AAOS/AOFAS Total Ankle Arthroplasty Course #3638; Orthopaedic Learning Center, Rosemont, IL

3/14/14 Pes Planovalgus: From adolescent to adulthood. AAOS Annual Meeting, New Orleans, LA

3/14/14 Don’t get on my nerves. AAOS Annual Meeting, New Orleans, LA

3/14/14 Ask the expert case review. AAOS Annual Meeting, New Orleans, LA

4/04/14 Emerging trends in ankle arthritis.  21st annual Thomas Dameron Lectureship, Raleigh NC

4/04/14 Advances in diabetic foot and ankle reconstruction. 21st annual Thomas Dameron Lectureship, Raleigh, NC

4/11/14 Particulated juvenile articular cartilage allograft for treatment of osteochondral lesions in the ankle: The Medstar Union Memorial Hospital experience. International Congress on Cartilage Repair of the Ankle, ESSKA-AFAS 2014,  Prague , Czech Republic

Poster Presentations:

2/24/96 An extensive exposure of the midfoot for treatment of the severe rocker bottom deformity. AAOS Annual Meeting, Atlanta, GA

11/15/97 Assessment and management of the rocker-bottom foot. Combined Meeting of AOFAS and Japanese Society for Surgery of the Foot, Waikoloa, Hawaii

11/15/97 A biomechanical evaluation of two different screw positions for fusion of the calcaneocuboid joint. Combined Meeting of the AOFAS and the Japanese Society for Surgery of the Foot, Waikoloa, Hawaii

11/15/97 Saphenous vein graft for tibial neuralgia. Combined Meeting of the AOFAS and the Japanese Society for Surgery of the Foot, Waikoloa, Hawaii

6/24/98 The topography of the posterior tibial nerve and its branches. AOFAS Summer Meeting, Boston, MA

6/25/98 Transpedal multiplanar wedge osteotomies/fusion for complex midfoot and hindfoot deformities. AOFAS Summer Meeting, Boston, MA

6/26/98 A biomechanical evaluation of two different screw positions for fusion of the calcaneocuboid joint. AOFAS Summer Meeting, Boston, MA

6/26/98 Preliminary results of peripheral nerve stimulation for intractable lower extremity nerve pain. AOFAS Summer Meeting, Boston, MA

9/16/98 Preliminary results of peripheral nerve stimulation. International Neuromodulation Society Meeting, Lucerne, Switzerland

9/17/98 Preliminary results of isolated subtalar arthrodesis: Factors leading to failure. COMFAS Meeting, Venice, Italy

10/98 Preliminary results of PNS. Australian Orthopaedic Society, Cairns, Australia

10/98 Transpedal multiplanar wedge osteotomies/fusion for complex midfoot and hindfoot deformities. Australian Orthopaedic Society, Cairns, Australia

2/4/99 Complex midfoot and hindfoot deformities treated with transpedal multiplanar wedge osteotomies/fusion. The 66th Annual AAOS Meeting, Anaheim-Orange County, CA

3/4/99 Universal immediate or early post-operative prosthesis for below-knee amputees. AAOP, New Orleans, LA

4/18/99 Pedobarograph releve analysis. SICOT Meeting, Sidney, Australia

7/9/99 A new technique for fixation of fibula fracture. AOFAS Summer Meeting, San Juan, Puerto Rico

7/9/99 Acquired midtarsus deformity classification system: Interobserver reliability-intraobserver reproducibility. AOFAS Summer Meeting, San Juan, Puerto Rico

7/9/99 Pneumatic Achilles wrap: Prospective. AOFAS Summer Meeting, San Juan, Puerto Rico

2/24/00 Preliminary results of peripheral nerve stimulation for intractable lower extremity pain. American Academy of Pain Medicine, New Orleans, LA

2/25/00 Surgical management of chronic lower extremity neuropathic pain. American Academy of Pain Medicine, New Orleans, LA

3/18/00 Airlimb prospective study. American Orthotic and Prosthetic Association Annual Meeting, San Diego, CA

3/18/00 New fibula fracture fixation technique: A chronic Achilles tendon reconstruction. Instructional Course Lecture, AAOS 67th Annual Meeting, Orlando, FL

3/15/02 A short-term prospective analysis of peripheral nerve stimulation for intractable lower extremity nerve pain. American Pain Society, Baltimore, MD

3/10/04 Supplementary K-wire fixation for crescentic and Ludloff proximal metatarsal osteotomies: A biomechanical study. AAOS 71st Annual Meeting, San Francisco, CA

7/13/06 Biomechanical comparison of locking plate and intramedullary fixation for tibiotalocalcaneal arthrodesis. Co-author, AOFAS 22nd Annual Summer Meeting, La Jolla, CA

7/14/06 A subtalar implant (arthroereisis) as an adjunct treatment for posterior tibial tendon dysfunction: Short term radiographic results. Co-author, AOFAS 22nd Annual Summer Meeting, La Jolla, CA

12/11/06 Risk to neurovascular structures using posterolateral percutaneous ankle screw placement: A cadaveric study. Co-author, SOMOS 48th Annual Meeting, Honolulu, HI

7/13/07 Small incision distal metatarsal shaft osteotomy (Kramer) for treatment of bunionette deformity: A retrospective comparative investigation. Co-author, AOFAS 23rd Annual Summer Meeting, Toronto/ Ontario, Canada

7/13/07 Stability and angle correction capacity of the modified Mau osteotomy: A biomechanical study. Co-author, AOFAS 23rd Annual Summer Meeting, Toronto/ Ontario, Canada

7/13/07 The effect and safety of the dorsal opening wedge (Cotton) osteotomy as a combined procedure for the treatment of flatfoot deformity: Short term follow-up reports from 6-24 months. Co-author, AOFAS 23rd Annual Summer Meeting, Toronto/ Ontario, Canada

7/14/07 Blade-plate compared with locking-plate fixation for tibiotalocalcaneal arthrodesis: A biomechanical study. Co-author, AOFAS 23rd Annual Summer Meeting, Toronto/ Ontario, Canada

7/14/07 Chevron osteotomy: A 3-D digitizer analysis of metatarsal head movement in the frontal and transversal plane depending on the orientation of the osteotomy (determined with a guide wire) with saw bone Co-author, AOFAS 23rd Annual Summer Meeting, Toronto/ Ontario, Canada

7/14/07 Tendon graft with interference screws and one Fiberwire button fixation of ankle distal tibiofibular syndesmosis diastasis: A biomechanical study. Co-author, AOFAS 23rd Annual Summer Meeting, Toronto/ Ontario, Canada

7/15/07 Mechanical response of the lateral ankle ligaments after modified Brostrom procedure. Co-author, AOFAS 23rd Annual Summer Meeting, Toronto/ Ontario, Canada

7/15/07 Periosteal flap augmentation of the Brostrom lateral ankle reconstruction: Technique tip. Co-author, AOFAS 23rd Annual Summer Meeting, Toronto/ Ontario, Canada

7/15/07 Radiographic and pedobarographic comparison of femoral head allograft versus block plate with dorsal opening wedge medial cuneiform osteotomy: A cadaver study. Co-author, AOFAS 23rd Annual Summer Meeting, Toronto/ Ontario, CanadA

7/15/07 The effects of bupivicaine on cultured tenocytes. Co-author, AOFAS 23rd Annual Summer Meeting, Toronto/ Ontario, Canada

6/26/08 The effect of recombinant human morphogenetic protein-2 (hrBMP-2) on the human tenocyte: Apreliminary study. Co-author, AOFAS Annual Summer Meeting

2/22/09 Cell concentrate from autologous bone marrow augments bone grafting in the lower extremity. Co-author, ORS 55th Annual Meeting, Las Vegas, NV

2/23/09 Cell concentrate from autologous bone marrow augments bone grafting in the lower extremity. Co-author, ORS 55th Annual Meeting, Las Vegas, NV

9/21/09 Development and in vitro analysis of novel human mesenchymal stem cell delivery textile scaffolds for Achilles tendon repair. Co-author, 2009 World Stem Cell Summit, Baltimore, MD

3/6/10 Normal and diseased primary human tenocytes proliferate in response to rhPDGF-BB. Co-author, ORS 56th Annual Meeting, New Orleans, LA

7/7/10 Xenograft scaffold full-wrap reinforcement of Krackow Achilles tendon repair: A biomechanical study. Co-author, AOFAS 26th Annual Summer Meeting, Baltimore, MD

7/8/10 Lateral column plantar pressures with calcaneocuboid sparing modified double arthrodesis versus conventional triple arthrodesis. Co-author, AOFAS 26th Annual Summer Meeting, Baltimore, MD

2/4/12 Stem cell loaded sutures improve tendon healing and repair strength in a rat model. Co-author, ORS Annual Meeting, San Francisco, CA

2/5/12 Inflammatory cytokine composition and metabolic profile of post-traumatic ankle joint arthritis. Co-author, ORS Annual Meeting, San Francisco, CA

3/5/12 Inflammatory cytokine composition and metabolic profile of post-traumatic ankle joint arthritis. Co-author, MedStar Health Research Symposium, Columbia, MD

3/5/12 Stem cell loaded sutures improve tendon healing and repair strength in a rat model. Co-author, MedStar Health Research Symposium, Columbia, MD

3/5/12 Lateral column plantar pressures after conventional triple arthrodesis versus calcaneocuboid sparing modified double arthrodesis. Co-author, MedStar Health Research Symposium, Columbia, MD

3/5/12 Distal tibia plafondplasty for talar dome access. Co-author, MedStar Health Research Symposium, Columbia, MD

3/5/12 Biomechanical comparison of two ankle arthrodesis techniques: A posteriorly applied blade plate vs. crossed screws. Co-author, MedStar Health Research Symposium, Columbia, MD

3/5/12 Xenograft scaffold full-wrap reinforcement of Krackow Achilles tendon repair: A biomechanical study. Co-author, MedStar Health Research Symposium, Columbia, MD

3/5/12 Computed tomography analysis of third webspace injections for interdigital neuroma. Co-author, MedStar Health Research Symposium, Columbia, MD

5/12/12 Inflammatory cytokine composition and metabolic profile of post-traumatic ankle joint arthritis. Co-author, 10th World Congress of the International Cartilage Repair Society, Montreal, Canada

1/26/13 Stereological quantification of the plantar foot pad in young versus aging rats. Co-author, Meeting of the Orthopaedic Research Society (ORS), San Antonio, TX

1/27/13 Efficacy of a mesenchymal stem cell loaded surgical mesh in the healing of rat Achilles tendon ORS Annual Meeting, San Antonio, TX

3/04/13 Efficacy of a mesenchymal stem cell loaded surgical mesh in the healing of rat Achilles tendon, Co-author, MedStar Health Research Symposium, Columbia, MD

3/04/13 Quantitative comparison of plantar fat pads in young aging aging rats: a stereological study. Co-author, MedStar Health Research Symposium, First place winner in the Orthopedics/Sports Medicine category, Columbia, MD

4/13/13 Kramer osteotomy for bunionettes. MOA 72nd Annual Meeting, Baltimore, MD

4/18/13 Lesions at the junction between uncalcified and calcified cartilage zones during the development of osteoarthritis. Co-author, OARSI Annual Meeting, Philadelphia, PA

7/19/13 A biomechanical evaluation of threaded headless screws compared to traditional headed screws in a subtalar fusion model.Co-author, AOFAS Summer Meeting, Hollywood, FL

7/20/13 The effect of Ddnamic vs. static fixation on malreduction of unstable syndesmotic injuries. Co-author, AOFAS Summer Meeting, Holywood, FL

12/03/13 Muscle-derived mesenchymal stem cells in the pathology of heterotopc ossific. Co-author, 6th Annual Maryland Stem Cell Research Symposium, Baltimore, MD

3/10/14 Muscle-derived mesenchymal stem cells in the pathology of heterotopc ossific. Co-author, 3rd Annual MedStar Health Research Symposium, Columbia, MD

3/14/14 Management of acute traumatic ankle fractures in the neuropathic patient: Recognizing the sweet to avoid the sour. Co-author, AAOS 2014 Scientific Exhibit, AAOS Annual Meeting, New Orleans

3/15/14 The Effect of Dynamic vs. Static Fixation on Malreduction of Unstable Syndesmotic Injuries. Co-author, AAOS Specialty day, AAOS Annual Meeting, New Orleans, LA

3/15/14 Histologic characterization of synovium in Charcot neuroarthropathy. Co-author, AOFAS Annual Specialty Day in conjunction with the AAOS New Orleans, LA

3/16/14 TNF- alpha increases chondrolysis by fibroblast-like synoviocytes mediate chondrolysis and potentially osteolysis in Charcot neuroarthropy. Co-author, ORS Annual Specialty Day in conjuction with the AAOS, New Orleans, LA

3/17/14 The pathology of the calcified zone of articular cartilage in post-traumatic osteoarthritis in rat knees. Co-author, ORS Annual Specialty Day in conjuction with the AAOS, New Orleans, LA

Review Courses:

10/13/90 Nerves and RSD – Surgery of the foot and ankle. Regional Review Course, Philadelphia, PA

11/91 Nerves and RSD – Surgery of the foot and ankle. Regional Review Course, New York, NY

10/93 Talus fractures. AOFAS Regional Review Course, Baltimore, MD

10/93 Anatomy of the foot. AOFAS Regional Review Course, Baltimore, MD

9/94 Arthritic conditions of the forefoot. AOFAS Regional Resident Review Course, Philadelphia, PA

11/12/99 Reconstruction techniques for subtalar instability. The William Goldfarb Foundation 29th Annual Goldfarb Clinical Conference and 19th Annual Intensive, Review, Refresher & Recertification Course, Harrisburg, PA

11/12/99 Midfoot fusion techniques for neuropathic feet. William Goldfarb Foundation 29th Annual Goldfarb Clinical Conference and 19th Annual Intensive, Review, Refresher & Recertification Course, Harrisburg, PA

11/12/99 Hallux metatarsophalangeal arthritis. William Goldfarb Foundation 29th Annual Goldfarb Clinical Conference and 19th Annual Intensive, Review, Refresher & Recertification Course, Harrisburg, PA

10/7/00 Foot and Ankle. Johns Hopkins University OITE Review Course, Baltimore, MD

10/02 Foot and ankle review. Johns Hopkins University/ Union Memorial In-Training Exam OITE Review Course, Baltimore, MD

11/1/03 Lesser toes/forefoot. Johns Hopkins Hospital OITE Review Course, Baltimore, MD

11/1/03 Sports. Hopkins University OITE Review Course, Baltimore, MD

11/1/03 Arthritis-ankle, hindfoot, midfoot, forefoot (include hallux rigidus). Hopkins University OITE Review Course, Baltimore, MD

5/23/04 Foot and ankle arthritis. Orthopaedic Review Course, Baltimore, MD

5/23/04 Tendon disorders. Orthopaedic Review Course, Baltimore, MD

5/23/04 Sports medicine. Orthopaedic Review Course, Baltimore, MD

6/26/05 Reconstructive indications for external fixation. Johns Hopkins University OITE Review Course, Baltimore, MD

6/26/05 Midfoot frame and case presentation. Johns Hopkins University OITE Review Course, Baltimore, MD

6/26/05 Distraction arthroplasty frame and case presentation. Johns Hopkins University OITE Review Course, Baltimore, MD

6/27/05 Foot and ankle arthritis. Johns Hopkins University OITE Review Course, Baltimore, MD

6/27/05 Tendon disorders. Johns Hopkins University OITE Review Course, Baltimore, MD

6/27/05 Sports medicine. Johns Hopkins University OITE Review Course, Baltimore, MD

6/10/09 Foot and ankle training session. Johns Hopkins University OITE Review Course, Baltimore, MD

9/17/09 Foot and ankle training session. Johns Hopkins University OITE Review Course, Baltimore, MD

6/9/10 Foot and ankle training session. Johns Hopkins University OITE Review Course, Baltimore, MD

10/6/11 Foot and ankle training session. Johns Hopkins University OITE Review Course, Baltimore, MD

Grand Rounds:

12/88 The use of AO technique for complicated lower extremity fractures. Priorov Central Institute of Traumatology and Orthopaedics, Moscow, USSR

1/19/90 Neuropathies of the foot and ankle in athletes. Baylor College of Medicine, Orthopaedic Department, Houston, TX

5/90 Neuropathies of the foot and ankle in athletes. University of Texas at Houston, Orthopaedic Division, Houston, TX

3/23/91 Painful heel syndrome. Johns Hopkins Hospital, Orthopaedics Department, Baltimore, MD

4/12/91 Neuropathies in athletes. Sinai Hospital, Physical Medicine and Rehabilitation, Baltimore, MD

11/91 Lower extremity problems in dancers. Sinai Hospital, Department of Rehabilitation, Baltimore, MD

3/14/92 Athletic lower extremity neuropathies. Johns Hopkins Hospital Baltimore, MD

4/3/92 Rheumatologic conditions of the foot and ankle. University of Maryland, Department of Orthopaedics, Baltimore, MD

11/92 Fusions of the foot and ankle: Leg pain in athletes. Soroko Medical Center Foot and Ankle Trauma, Bersheva, Israel

6/9/94 Surgery of the foot and ankle: Technical advances. Hospital for Joint Diseases Orthopaedic Institute, New York, NY

1/28/95 Neuropathic midfoot diagnosis and treatment. Johns Hopkins University, Baltimore, MD

4/15/95 Treatment of severe midfoot deformities: The plantar plate. Johns Hopkins University, Baltimore, MD

3/19/96 Treatment Charcot foot and salvage for chronic nerve problems in the foot and ankle. Baylor School of Medicine, Department of Orthopaedics, Houston, TX

3/26/96 Advances in foot and ankle reconstruction. Allegheny General Hospital, Pittsburgh, PA

12/6/96 Inflammatory arthritis of the foot and ankle. University of Maryland, Department of Orthopaedics, Baltimore, MD

9/17/97 Charcot foot and ankle. Mt. Sinia Hospital, Department of Orthopaedics, New York, NY

1/27/99 Surgical management of complex foot & ankle trauma. , University of Texas Medical Branch, Department of Orthopaedics

2/26/99 Complex salvage in the foot and ankle trauma. University of Maryland, Shock Trauma, Baltimore, MD

12/2/99 Transtibial amputation. Rehabilitation Center, Bad Endorf; Germany

12/9/99 Neurostimulator for chronic lower extremity pain. Visiting Lectureship, Cleveland Clinic, Cleveland, OH

5/11/00 Surgical management for chronic nerve pain. Milton S. Hershey Medical Center, Department of Orthopaedics, Hershey, PA

5/27/00 Management of intractable lower extremity neuralgia. University of Rochester, University Orthopaedic Associates, Strong Memorial Hospital. Rochester, NY

6/19/00 Charcot reconstruction. Aalborg University, Orthopaedic Department, Aalborg, Denmark

6/19/00 Transtibial amputation. Aalborg University, Orthopaedic Department, Aalborg, Denmark

4/11/01 Complex ankle, hindfoot, and midfoot reconstruction. University of Utah, Department of Orthopaedics, Salt Lake City, Utah

4/19/01 Treatment of chronic nerve disorders. Visiting Professor, Rothman Institute, Jefferson Department of Orthopaedic Surgery, Philadelphia, PA

5/24/01 Salvage of complex foot and ankle deformities. Robert Wood Johnson University of Medicine and Dentistry, New Brunswick, NJ

12/5/01 Salvage for complex neuralgia in the lower extremeties. University of Pittsburgh, Pittsburgh, PA

11/18/02 Podiatric and x-ray review with residents/Attendings. Gunderson Lutheran Hospital, Wisconsin Orthopaedic Foot & Ankle Club, Wisconsin, IL

11/20/02 Complex Foot and Ankle Trauma and Reconstruction. University of Illinois, Chicago, IL

5/8/03 Osteotomies for foot and ankle reconstruction. George Washington University, Washington, DC

9/5/03 Fresh allograft ankle resurfacing. Johns Hopkins Department of Orthopaedic Surgery, Baltimore, MD

6/8/04 Talus and calcaneal fractures. Resident Conference, Union Memorial Hospital, Baltimore, MD

11/16/04 The adult acquired flatfoot. Mt. Sinai Hospital, Department of Orthopaedics, New York, NY

4/14/05 Adult flat foot: Biochemical, retrospective and prospective assessments. Johns Hopkins Medical Institution, Department of Orthopaedics, Baltimore, MD

3/29/06 Foot and ankle disorders. Nathaniel Gould Lectureship, University of Vermont, Burlington, VT

4/20/06 Tendon disorders of the foot and ankle. Melvin Jahss Lectureship, Hospital for Joint Disease, New York, NY

4/20/06 Posterior tibial tendonitis: Biomechanical and clinical perspective. Melvin Jahss Lectureship, Hospital for Joint Disease, New York, NY

6/15/06 Achilles tendinopathy: The spectrum of the disease. Johns Hopkins Medical Institution, Baltimore, MD

2/1/07 Hallux valgus: Common surgical procedures. Johns Hopkins Bayview, Baltimore, MD

5/11/07 The diagnosis and treatment of tendon disorders of the foot and ankle. Ohio State University, Department of Orthopaedics, Columbus, OH

6/18/07 Foot and ankle sports injuries. Yonsei University, Seoul, Korea

9/11/07 Tendon disorders of the foot and ankle. University of Maryland, Baltimore, MD

10/5/07 Posterior tibial tendon insufficiency: An archetypal investigation. Michael Bonfiglio Visiting Professor, University of Iowa Orthopaedic Alumni Association, Department of Orthopaedic Surgery and Rehabilitation, Iowa City, IA

10/6/07 Reconstruction of the diabetic foot and ankle: Sweet salvation. Michael Bonfiglio Visiting Professor, University of Iowa Orthopaedic Alumni Association, Department of Orthopaedic Surgery and Rehabilitation, Iowa City, IA

2/19/08 Rheumatologic disorders of the foot and ankle. University of Maryland, Division of Rheumatology, Baltimore, MD

2/10/09 Sports injuries of the foot and ankle. Georgetown University, Department of Orthopaedics, Washington, DC

9/11/09 Advances in the treatment of tendinopathy in the foot and ankle. Rose Honorary Lecture in Foot and Ankle, Hospital for Surgery, New York, NY

9/18/09 Foot and ankle nerve pain. Johns Hopkins Hospital, Baltimore, MD

4/9/10 Foot and ankle trauma and reconstruction. Case presentations, 15th Annual Gerald S. Laros Memorial Visiting Professorship, University of Chicago, Chicago, IL

4/10/10 Advances in the treatment of foot & ankle sports. 15th Annual Gerald S. Laros Memorial Visiting Professorship, University of Chicago, Chicago, IL

1/11/11 Sports and dance injuries of the foot and ankle. University of Virginia, Charlottesville, VA

1/12/11 Advances in treating tendon disorders; Achilles and posterior tibialis. University of Virginia, Charlottesville, VA

4/12/11 Hitchhikers guide to the Achilles tendon. Duke-UNC, Triangle Orthopaedics, Durham, NC

10/21/12 Tendon injuries of the foot and ankle. Syracuse University, Department of Orthopaedics, Syracuse, NY

1/7/13 Advances in treating Achilles and posterior tibial tendon disorders. Boston University School of Medicine, Department of Orthopaedic Surgery, Boston, MA

1/11/13 Advances in the treatment of tendons of the foot and ankle. Yale University School of Medicine, Department of Orthopaedics, New Haven, CT

1/11/13 Updates on Charcot of the foot and ankle. Yale University School of Medicine, Department of Orthopaedics, New Haven, CT

11/15/13 Advances in tendon injuries- Earl C. Marmer, MD Lecture. Einstein University, Department of Orthopaedics, Philadelphia, PA

Workshops/Seminars: \*Unless otherwise specified, role is lecturer

3/1/97 Reconstruction for lower extremity trauma. Spring Meeting and Workshop, Baltimore, MD

3/28/98 Physician Roundtable for the Advancement of Neurostimulation, Philadelphia, PA

2/5/99 Salvage of complex foot & ankle trauma. AAOS 66th Annual Meeting, Anaheim-Orange County, CA

2/5/99 Complex midfoot and hindfoot deformities treated with transpedal multiplanar wedge osteotomies/fusion. AAOS 66th Annual Meeting, Anaheim-Orange County, CA

4/1/00 Pantalar arthrodesis. Institute for Foot & Ankle Studies, Baltimore, MD

4/1/00 Plantar plating of a midfoot reconstruction (video). Institute for Foot & Ankle Studies, Baltimore, MD

4/2/00 Application of ring external fixator. Institute for Foot & Ankle Studies, Baltimore, MD

4/2/00 Neuropathic arthrodesis. Institute for Foot & Ankle Studies, Baltimore, MD

4/2/00 Neuropathic arthrodesis with a ring external fixator (video). Institute for Foot & Ankle Studies, Baltimore, MD

3/31/01 Application of ring external fixation: Midfoot/forefoot reconstructions. 2001 Institute for Foot and Ankle Studies, Union Memorial Hospital, Baltimore, MD

4/1/01 Neuropathic arthrodesis. 2001 Institute for Foot and Ankle Studies, Union Memorial Hospital, Baltimore, MD

4/13/02 The Ludloff Osteotomy. Institute for Foot & Ankle Studies, Baltimore, MD

4/13/02 Application of a ring external fixator. Institute for Foot & Ankle Studies, Baltimore, MD

4/13/02 Lesser metatarsal distal osteotomy for deformity. Institute for Foot & Ankle Studies, Baltimore, MD

11/19/02 External fixation: Thin-wire fixation in difficult periarticular fracture, Charcot foot frames, x-ray review of difficult cases. DePuy Sponsored Lecture, The Wisconsin Foot and Ankle Club, Milwaukee, IL

4/12/03 Ludloff bunionectomy lesser metatarsal osteotomy. 4th Annual Institute for Foot & Ankle Studies, Mercy Medical Center, Baltimore, MD

4/12/03 Ludloff bunionectomy. Lesser metatarsal osteotomy (video). 4th Annual Institute for Foot & Ankle Studies, Mercy Medical Center, Baltimore, MD

4/13/03 Indications for ring fixator. 4th Annual Institute for Foot & Ankle Studies, Mercy Medical Center, Baltimore, MD

4/13/03 Indications for ring fixator (video). 4th Annual Institute for Foot & Ankle Studies, Mercy Medical Center, Baltimore, MD

2/28/04 The Ludloff Osteotomy. 5th Institute for Foot & Ankle Studies Learning Course, Mercy Medical Center, Baltimore, MD

2/28/04 Plantar arthrodesis and TTC (lecture and video). 5th Annual Institute for Foot & Ankle Studies, Mercy Medical Center, Baltimore, MD

2/29/04 Indications for ring fixator (lecture and video). 5th Annual Institute for Foot & Ankle Studies, Mercy Medical Center, Baltimore, MD

4/2/05 Discussion of triple arthrodesis. 7th Annual Institute for Foot & Ankle Studies, Mercy Medical Center, Baltimore, MD

4/2/05 Discussion of bunionectomy/Weil osteotomy. 7th Annual Institute for Foot & Ankle Studies, Mercy Medical Center, Baltimore, MD

4/3/05 Calcaneus fracture and video. 7th Annual Institute for Foot & Ankle Studies, Mercy Medical Center, Baltimore, MD

4/3/05 Indications for ring fixator. 7th Annual Institute for Foot & Ankle Studies, Mercy Medical Center, Baltimore, MD

10/20/05 Frames and Fixators. DePuy and Orthofix, Annual Meeting of the Orthopaedic Foot Club, Charlotte, NC

8/4/06 Japanese Study Group. Institute for Foot and Ankle, Mercy Hospital, Baltimore, MD

8/10/06 External Fixator. DePuy Sponsored Workshop, Philadelphia, PA

4/13/07 Ankle arthrodesis for salvage of large articular defects. Advanced Solutions for Foot & Ankle, St. Petersburg, FL

4/13/07 Revision hindfoot correction. Advanced Solutions for Foot & Ankle, St. Petersburg, FL

4/13/07 Tendon transfer for end-stage peroneal disease. Advanced Solutions for Foot & Ankle, St. Petersburg, FL

4/13/07 Techniques for external fixation and Charcot reconstruction. Advanced Solutions for Foot & Ankle, St. Petersburg, FL

4/13/07 Deltoid injury and reconstruction. Advanced Solutions for Foot & Ankle, St. Petersburg, FL

4/14/07 Percutaneous methods of treatment of calcaneus fracture. Advanced Solutions for Foot & Ankle, St. Petersburg, FL

4/14/07 Management of the infected ankle. Advanced Solutions for Foot & Ankle, St. Petersburg, FL

4/14/07 Intra-articular distal tibia fractures: Acute and chronic reconstruction. Case presentations and audience questions, Advanced Solutions for Foot & Ankle, St. Petersburg, FL

4/14/07 Distraction ankle arthroplasty. Advanced Solutions for Foot & Ankle, St. Petersburg, FL

4/28/07 Discussion of bunionectomy/metatarsal osteotomy. 8th Annual Orthopaedic Foot & Ankle Fellows Learning Center, Mercy Medical Center, Baltimore, MD

4/29/07 Indications for ring fixator: lecture and video. 8th Annual Orthopaedic Foot & Ankle Fellows Learning Center, Mercy Medical Center, Baltimore, MD

9/27/07 Effective utilization of external fixation in the lower extremity: Diabetic limb salvage. Pre-Conference Exfix Workshop, Georgetown University Hospital, Washington, DC

1/26/08 Discussion of bunionectomy and metatarsal osteotomy. 9th Annual Orthopaedic Foot and Ankle Fellows Learning Center, Mercy Medical Center, Baltimore, MD

1/27/08 Indications for ring fixator (lecture and video). 9th Annual Orthopaedic Foot and Ankle Fellows Learning Center, Mercy Medical Center, Baltimore, MD

2/22/08 FDL transfer/lateral column (live demo). Faculty Instructor, Advanced Solutions for Foot and Ankle, Phoenix, AZ

2/23/08 Peroneal tendon (live demo). Faculty Instructor, Advanced Solutions for Foot and Ankle, Phoenix, AZ

11/1/12 Lateral Ankle Replacement Cadaveric Workshop. Foot and Ankle Society Annual Meeting, Baltimore, MD

**Mentoring** (pre- and post-doctoral)

Advisees:

1990-Present Mentor dance science students annually; Dance Science Externship Program, Goucher College, Baltimore, MD

1990- Present Mentor orthpaedic residents in foot and ankle studies, assist in the development of curriculum, writing evaluations, teaching in operating room, teaching in labs, office, lectures, hospital, journal club, OITE prep, conferences, research projects, presentation coaching, writing projects, IRB/Grants, Maintaining accreditation AGME; Union Memorial Hospital, Baltimore, MD

1990-Present Mentor/ Director of foot and ankle fellows, assist in the development of curriculum, write evaluations, teaching in operating room, teaching in labs, office, lectures, hospital, journal club, OITE prep, conferences, research projects, presentation coaching, writing projects, IRB/ Grants, Maintaining accreditation AGME; Foot and Ankle Departmental Followship Program, Union Memorial Hospital, Baltimore, MD

1993-Present Mentor students in developing the Airlimb Instructional Video (1998), Sliding Graft Technique (1999), Peroneal Tendon Groove Deepening Technique (2009); Art as Applied to Medicine Program, Johns Hopkins School of Medicine, Baltimore, MD

1994-Present Mentor/Teacher in clinic setting, operating room and biomechanics lab for high school, college, graduate students and medical students ; Johns Hopkins University, Goucher, Towson University, Loyola College, University of Maryland, Georgetown University, Duke, Bucknell, Tufts, Baltimore, MD

1994-Present Provide scholarships and externships for students interested in the health sciences; Schon Scholarship in Dance Science, Goucher College, Baltimore, MD

1994-Present Mentor and lecturer for PMR residents in office/clinic setting; Johns Hopkins

2001 Project Mentor for the Claw; Engineering Design Class, Johns Hopkins University, Baltimore, MD

2001 Project Mentor for The Jig; Engineering Design Class, Johns Hopkins University, Baltimore, MD

2005-Present Reviewer, Consultant, Mentor and Project Sponsor; Biomedical Engineering Design Class, Johns Hopkins University, Baltimore, MD

2008-Present Mentor for orthopaedic residents Assist in the development of curriculum, writing evaluations, teaching in the operating room, office, hospital, lectures, journal club, OITE prep, research projects, presentation coaching, writing projects, IRB/ Grants, conferences, meetings; Department of foot and Ankle Studies, Johns Hopkins University, Baltimore, MD

2008-2011 Project Mentor; Biomedical Engineering Design Class, Johns Hopkins University, Baltimore, MD

2009-Present Lecturer for students, the lower extremity anatomy and biomechanics; Biomedical Engineering and Design Class, Johns Hopkins University, Baltimore, MD

2009-Present Lecturer for students; Biomechanics Class, Johns Hopkins University, Baltimore, MD

2009-Present Lecturer for students; Inventions Design Clas, Johns Hopkins Baltimore, MD

2009 Mentor, Peroneal Tendon Groove Deepening Technique, student art project; Art as Applied to Medicine Program, Johns Hopkins School of Medicine, Baltimore, MD

2009 Mentor/Sponsor, Stem Cell Immobilization for Orthopaedic Implant, senior design project, awarded Second Place, Center for Bioengineering Innovation and Design 2009 Design Day; Biomedical Engineering Class, Johns Hopkins University, Baltimore, MD

2009 Mentor/Sponsor, Stem Cell Suture, design project, Awarded First Place, Center for Bioengineering Innovation and Design 2009 Design Day; Biomedical Engineering Class, Johns Hopkins University, Baltimore, MD

2010 Mentor/Sponsor, Stem Cell Bearing Surgical Ointment, senior design project; Biomedical Engineering Class, Johns Hopkins University, Baltimore, MD

2010 Mentor/Sponsor, Intelligent Drill, design project, Awarded Second Place, Center for Bioengineering Innovation and Design 2010 Design Day, Awarded Third Place Honors in the undergraduate division of the 2010 Collegiate Inventors Competition; Biomedical Engineering Class, Johns Hopikins University, Baltimore, MD

2011 Mentor/Sponsor, Third World Prosthesis Leg, design project; Biomedical Engineering, Johns Hopkins University, Baltimore, MD

2011 Mentor/Sponsor, Immediate Post Op Prosthesis, design project; Biomedical Engineering, Johns Hopkins University, Baltimore, MD

2011 Mentor/ Sponsor, Screw Head and Driver Modifications for High Torques, design project; Biomedical Engineering, Johns Hopkins University, Baltimore, MD

2011 Mentor/Sponsor, Stem Cell Therapy for Soft Tissue Defects, design project; Biomedical Engineering, Johns Hopkins University, Baltimore, MD

2011 Mentor/Sponsor, Cell Therapeutic Suture Anchor, design project; Biomedical Engineering, Johns Hopkins University, Baltimore, MD

2013 Mentor/Sponsor, Instalimb: Prosthesis for the Developing World, design projet; Biomedical Engineering, Johns Hopkins University, Baltimore, MD

**Educational Extramural**

CURRENT

2008- PresentJohnson & Johnson Co. Educational Grant for International Fellowship

DePuy

$57,092

Role: PI: 50%

2012-2013 Restricted Fellowship Grant

A12-ENUS-GR-363

Smith & Nephew Advanced Surgical Devices

$25,000

Role: Foot & Ankle Fellowship Program Director; PI: Notes: Funds for support of the foot and ankle fellowship academic year 2012-2013

2012-2013 Omega Fellowship Grant

000735

Omega

$30,000

Role: Foot & Ankle Fellowship Program Director; PI: Notes: Funds for support of the foot and ankle fellowship academic year 2012-2013

PREVIOUS

2006-2007 Johnson & Johnson Co. Educational Grant

DePuy

$30,000

Role: Foot & Ankle Fellowship Program Director; PI: Notes: Funds for support of the foot and ankle fellowship academic year 2006-2007

2010-11 Omega Fellowship Grant  
000435  
Omega  
$36,250  
Role: Foot & Ankle Fellowship Program Director; PI: Notes: Funds for support of the foot and ankle fellowship academic year 2010-2011

**CLINICAL ACTIVITIES**

**Certification**

Medical, other state/government licensure

3/14/90-2015 Maryland Medical License, D0039759

1991-2000 New York Medical License, inactive

4/2/86-2015 New Yor Medical License, 165785-1

Boards, other specialty certification

2012 American Board of Orthopaedic Surgery Re-certification

2004 American Board of Orthopaedic Surgery Re-certification

1993 American Board of Orthopaedic Surgery Certification

**Clinical Extramural Funding**

CURRENT

2009-PresentProspective, Randomized, Controlled, Multi-Center, Pivotal Human Clinical Trial to Evaluate the Safety and Effectiveness of GEM OS1 Bone Graft Compared to Autologous Bone Graft as a Bone Regeneration Device in Foot and Ankle Fusions

Biomimetic Therapeutics

Role: PI at JHU site; Notes: Funded study under contract based on per patient enrollment

2010- Present Prospective study of DeNovo Natural Tissue Graft for Treatment of Cartilage Defects of the Talus

2010-250

Role: PI: Notes: Investigator initiated study

2010- Present Treatment of Cartilage Defects of the Talus with DeNovo Natural Tissue Graft

2010-200

Role: PI: Notes: Investigator initiated study

2011- Present Post Market, Longitudinal Data Collection Study of Articular Cartilage Lesions in the Ankle Treated with DeNovo NT Natural Tissue Graft

2012-467

Zimmer

Role: PI:

**ORGANIZATIONAL ACTIVITIES**

**Institutional Administrative Appointments**

1990-Present Coordinator, Annual Dance Medicine Symposium, Goucher College, Towson, MD

1992-Present Baltimore City and Med Chi Society Performing Arts Committee, Baltimore, MD

1994-Present Union Memorial Hospital Quality Assurance Committee, Union Memorial Hospital, Baltimore, MD

1994-Present Performance Improvement Committee, Orthopaedic Department, Union Memorial Hospital, Baltimore, MD

1995-Present Surgical Policy Committee, Union Memorial Hospital, Baltimore, MD

1995-1998 Post Graduate Testing Committee, AOFAS

1995-1998 Sports Medicine Committee, AOFAS

1997-2000 Fellowship Training Committee, AOFAS

1999-2005 Foot & Ankle Program Sub-Committee, AAOS

2002-Present Corporate Relations Committee, OREF

2002-Present Corporate Relations Committee, OREF

2003-Present Membership Committee, AOFAS

2005-Present Co-Founder, Orthobiologic Lab, Union Memorial Hospital, Baltimore, MD

2005-Present Reviewer and consultant, Engineering Design Class, Johns Hopkins University, Baltimore, MD

**Editorial Activities**

Editorial Board Appointments

2002-2005 Associate editor, Foot and Ankle International

2005-2010 Assistant editor, Foot and Ankle International

Journal Peer Review Activities

1996 Reviewer, Physician and Sports Medicine

1999-Present Reviewer, American Journal of Orthopaedics

2003-2010 Reviewer, Journal of Bone and Joint Surgery

2013-Present Reviewer, Othropaedic Knowledge Online Journal

**Advisory Committees, Review Groups/ Study Sections**

1990-Present Consultant, Dance Medicine and Injuries; Goucher College, Towson University, Morgan College, Baltimore School for the Arts, Peabody Institute, Baltimore, MD

1990-Present Coordinator, Annual Dance Medicine Symposium; Goucher College, Towson, MD

1998-Present Consultant, Sports Medicine; Georgetown University, Washington, DC

1999-2008 Consultant, DePuy Ace, Johnson & Johnson Co.

2001-2008 Consultant, Medtronic Specialists Bureau

2003 Consensus meeting, post-operative management of the lower extremity amputee, Clinical Standards of Practice, Union Memorial Hospital, Baltimore, MD

2005-Present Scientific Advisory Board, Nexa Orthopaedics/Tornier

**Professional Societies**

1990-Present American Orthopaedic Foot and Ankle Society, various committee memberships, Treasurer (2009-11), Vice President (2011-12), President (2012-13)

1990-Present Maryland Orthopaedic Association, member

1990-Present American Academy of Orthopaedic Surgeons, Fellow, member

1990-Present Baltimore City and Med Chi Society Performing Arts Committee, Membe

1991-Present Maryland Society for Rheumatic Diseases, member

1993-Present International Association for Dance Medicine and Science, member

1993-Present Maryland Council for Dance, member

1995-1998 Post Graduate Testing Committee, AOFAS, member

1995-1998 Sports Medicine Committee, AOFAS, member

1996-2009 American Diabetes Association, member

1997-2010 International Association for the Study of Pain, member

1998-2010 American Neuromodulation Society, member

1999-2005 Foot and Ankle Program Sub-Committee, AAOS, member

1999-Present North American Foot and Ankle Association, member

2000-2009 Pedorthic Footwear Association, member

2000-Present Orthopaedic Foot Club, President (2011-2013)

2001-Present International Functional Electrical Stimulation, member

2001-2009 International Society for Prosthetics & Orthotics, member

2001-Present American College of Surgeons, Fellow, member

2002-2010 Orthopaedic Rehabilitation Association, member

2003-2007 Membership Committee, AOFAS, member

**Conference Organizer, Session Chair**

1990 Coordinator and moderator, Lower extremity problems in dancers. 1st Annual Dance

Symposium, Goucher College, Towson, MD

3/21/92 Coordinator and moderator, Lower extremity problems in dancers. 2nd Annual Dance Symposium, Goucher College, Towson, MD

3/93 Coordinator and moderator, Lower extremity problems in dancers.3rd Annual Dance Symposium, Goucher College, Towson, MD

4/94 Coordinator and moderator, Lower extremity problems in dancers. 4th Annual Dance Medicine Symposium, Goucher College, Towson, MD

3/11/95 Coordinator and moderator, Lower extremity problems in dancers. 5th Annual Dance Medicine Symposium, Goucher College, Towson, MD

3/9/96 Coordinator and moderator, Lower extremity problems in dancers. 6th Annual Dance Medicine Symposium, Goucher College, Towson, MD

3/2/97 Coordinator and moderator, Lower extremity problems in dancers. 7th Annual Dance Medicine Symposium, Goucher College, Towson, MD

2001 Co-chairman, Foot and Ankle Orthopaedic Learning Course. AAOS, Chicago, IL

2002 Chairman, Foot and Ankle Orthopaedic Learning Course. AAOS, Chicago, IL

2004 Co-sponsor, Annual North American Foot and Ankle Association Meeting, Baltimore, MD

1/27/05 Coordinator, Union Memorial and Mercy Hospital Foot and Ankle Fellowship Reunion, Snowbird, Utah

4/20/07 Co-course director, The latest techniques in foot and ankle surgery. Practical Anatomy & Surgical Education, Saint Louis University, St. Louis, MO

5/9/08 Co-course director, The latest techniques in foot and ankle surgery. Practical Anatomy & Surgical Education, Saint Louis University, St. Louis, MO

11/1/12 President and coordinato, Annual Foot Club Meeting, Baltimore, MD

3/19/13 President and presenter, AAOS/AOFAS Annual Winter Meeting, Chicago, IL

7/16/13 President and presenter, AOFAS Annual Summer Meeting, Hollywood, FL

**Consultantships**

1990-Present Consultant, Dance Medicine & Injuries, Goucher College, Towson University, Baltimore School for the Arts, Peabody Institute, Baltimore, MD

1990-Present Coordinator, Annual Medicine Symposium, Goucher College, Baltimore, MD

1998-Present Consultant, Sports Medicine, Georgetown University, Washington, DC

1999-2009 Consultant, DePuy Ace, Johnson & Johnson Co.

2000- Present Consultant, DC United Soccer, Washington DC

2000-Present Consultant, Baltimore Blast Soccer, Baltimore, MD

2000-Present Consultant, Washington Nationals Baseball, Washington, DC

2000-Present Consultant, Washington Capitols Hockey, Washington, DC

2001-2006 Consultant, Medtronic Specialists Bureau

2003-2008 Consultant, Snyder Center of Pain Pharmacology

2005-2007 Consultant, Nexa Orthopedics Scientific Advisory Board

2006-Present Consultant, Zimmer

2007- Present Consultant, Tornier Scientific Advisory Board, Lower Extremity

2007-Present Consultant, Biomet

2008-2010 Consultant, Mimedx

2012-Present Consultant, Biomimetic

2012-Present Consultant, Guidepoint Global

2012-Present Consultant, Gershon Lehrman Group

2012-Present Consultant, Royer Biomedical

2013 Consultant/Panel Member, 2013 Peer reviewed Orthopaedic Research Program

**RECOGNITION**

**Awards, Honors**

1983Alpha Omega Alpha, Albany Medical College

1984 Senior Recognition Award, Albany Medical College

1983 Alpha Omega Alpha, Albany Medical College

1984 Senior Recognition Award, Albany Medical College

1988 American Orthopaedics Scholarship, Synthes, Inc.

1989 Fraunthal Travel Scholorship, Hospital for Joint Disease Orthopedic Institute

1991 Humana Award for Excellence, AOFAS Annual Research Award, AOFAS

1995 Selected as one of nine orthopaedic "Top Docs" by Baltimore Magazine's Survey of 1,700 doctors, nurses and patient groups, Baltimore Magazine

1996 Roger A. Mann Award for Clinical Research, AOFAS

1997 Roger A. Mann Award for Clinical Research, AOFAS

1999 “Best of Society” based on a peer review process, Member societies of the AAOS Council of Musculoskeletal Specialty Societies

2000 Second-Place Award for Best Paper, The MOA 2000 Scientific Program

9/25/00 First-Place, 5th Congress of the Balkan Military Medical Committee, Ankara-Turkey

2001-2003 Selection, AAOS sponsored juried art exhibit and e-motion Pictures: An exhibition of orthopaedics in art traveling exhibit, San Francisco, Washington DC, Chicago, Memphis, New York and Iowa City

2002-2005 AMA Physician Recognition Award in Continuing Medical Education, American Medical Association

2003 Health Care Hero Honoree for Advances in Health Care, The Daily Record, Baltimore, MD

2004 Goldner Award, AOFAS Summer Meeting, Seattle, WA

2005 Resident Writer’s Award Competition: Second-Place, AAOS Annual Meeting

2/23/05 “Best of Society” Poster Award, Council of Musculoskeletal Specialty Societies, Winter Meeting, Washington, DC

2005-2006 Best Doctors in America Recognition

2006 Jahss Visiting Professor, Hospital for Joint Diseases, New York University Orthopedic Institute, New York, NY

2006 Gould Visiting Professor, University of Vermont, Berlington, VT

7/06 Poster Award: First Place, AOFAS Summer Meeting, Torrey Pines

2007 Asia Pacific Orthopaedic Association (APOA ) research award, 15th Triennial AOPA Congress, Seoul, Korea

2007-2013 “Top Docs” by Baltimore Magazine’s Survery of doctors, nurses, and patient groups, Baltimore Magazine, Baltimore, MD

2008 Selection, AAOS sponsored juried art exhibit and e-motion Pictures: An exhibition of orthopaedics in art, San Francisco, CA

2008 AOFAS Goldner Award, Annual Summer Meeting of the AOFAS, Denver, CO

2009 The Rose Lectureship, Presbyterian Hospital, Hospital for Special Surgery New York, NY

2010 Todot Honoree for Commitment to Education and Community, Krieger Schechter Day School, Baltimore, MD

2010 15th Annual Gerald S. Laros Memorial Visiting Professorship, University of Chicago

Chicago, IL

2011 The Golden Apple Award for Excellence in Orthopaedic Teaching, Union Memorial Hospital, Department of Orthopaedics, Baltimore, MD

2011 Roger H. Michael Research Award for Outstanding Achievement in Orthopaedic Research, Union Memorial Hospital, Department of Orthopaedic Surgery Baltimore, MD

2012 “Top Doctors” , US News and World Report

2012 Roger H. Michael Research Award for Outstanding Achievement in Orthopaedic Research, MedStar Union Memorial Hospital, Department of Orthopaedic Surgery, Baltimore, MD

2012 1st place winner of the Clinical Research Award, Meeting of the Maryland Orthopaedic Association (MOA), Baltimore, MD

2012 ORS/OREF Travel Award in Orthopaedic Research Translation, Annual meeting of the Orthopaedic Research Society (ORS), San Fransisco, CA

2012 Professor’s Award for Excellence in Teaching, Johns Hopkins Medical Institute, Johns Hopkins University, Baltimore, MD

**Invited Talks**

10/26/90Heel pain entrapment neuropathy and double crush. 1990 Scientific Program, Hospital for Joint Diseases Orthopaedic Institute, New York, NY

11/7/90 Nerve entrapment syndromes in the foot and ankle. Maryland Society of Physical Medicine and Rehabilitation, Baltimore, MD

4/13/91 Leg, ankle, and foot problems in dancers. Coordinator and moderator, Dynamics of Dance Injuries Symposium, Goucher College, Towson, MD

3/21/92 Lower extremity problems in dancers. Coordinator, moderator and lecturer, 2nd Annual Dance Symposium, Goucher College, Towson, MD

3/24/92 Hindfoot pathology. Staff lecture, The Good Samaritan Hospital, Baltimore, MD

4/5/92 Orthopaedic perspectives on diabetic foot and ankle problems. Prescription Footwear Association, Beltsville, MD

4/16/92 Foot and ankle injuries in dancers. Faculty Lecture, Bennett Institute, Baltimore, MD

1993 Evaluation and treatment of major lower extremity work injuries. Workman’s Compensation Panel, Towson, MD

3/12/93 Salvage of the mangled and crushed lower extremity. NAON Workshop, Baltimore, MD

3/93 Coordinator and lecturer, 3rd Annual Dance Symposium, Goucher College, Towson, MD

1993 Dance injuries and screening process. Royal Academy of Dance, Peabody Institute, Towson, MD

6/18/93 Results of collegiate dance screenings. International Association for Dance Medicine & Science June Meeting, New York, NY

4/94 Coordinator, moderator, and lecturer, 4th Annual Dance Medicine Symposium, Goucher College, Towson, MD

11/18/94 Neuropathic midfoot fusion with a plantar plate: A modified technique. Annual Alumni Conference, Thomas Jefferson Orthopaedic Society, Philadelphia, PA

3/11/95 Coordinator, moderator and lecturer, 5th Annual Dance Medicine Symposium, Goucher College, Towson, MD

3/25/95 The foot and ankle in sports. Maryland Athletic Trainers Annual (MATA) Meeting, Westminster, MD

5/95 Foot and ankle problems: Heel to toe. Maryland Family Practice Annual Meeting, Ocean City, MD

5/19/95 Neuropathic midfoot treatment with plantar plate. Hospital for Joint Diseases Orthopaedic Institute Alumni Meeting, New York, NY

6/12/95 Profile of the collegiate dancer. International Association for Dance Medicine and Science/IAMA Conference on Arts Medicine and Therapy 5th Annual Meeting, Tel-Aviv, Israel

6/13/95 A comparative biomechanical analysis of pointe shoes under static and fatigue loading conditions. International Association for Dance Medicine and Science/IAMA Conference on Arts Medicine and Therapy 5th Annual Meeting, Tel-Aviv, Israel

6/14/95 Pointe shoe preference in collegiate dancers. International Association for Dance Medicine and Science/IAMA Conference on Arts Medicine and Therapy 5th Annual Meeting, Tel-Aviv, Israel

7/3/95 Lower extremity injuries in the workplace. Southern Association of Workers' Compensation Administrators, Baltimore, MD

3/9/96 Coordinator, moderator and lecturer, 6th Annual Dance Medicine Symposium, Goucher College, Towson, MD

3/10/96 Foot and ankle injuries in dancers. MATA Sports Medicine Symposium, Fair Lakes, VA

5/16/96 Common foot problems: What’s in and what's out. Southern Medical Association, Baltimore, MD

5/18/96 Lower extremity trauma and RSD. American Bar Association's 1996 Workers' Compensation Regional Conference, Columbia, MD

8/17/96 Adult foot disorders. 14th Annual Clinical Symposium, National Association of Orthopaedic Technologists, Baltimore, MD

3/2/97 Coordinator, moderator, and lecturer, 7th Annual Dance Medicine Symposium, Goucher College, Towson, MD

7/27/97 Assessment and management of dancer's injuries. Maryland Athletic Trainer's Association, Laurel, MD

8/15/97 The rocker bottom foot. Lecture to the Israeli Orthopaedic Foot & Ankle Society (IOFAS), Tel Hashomer, Israel

8/15/97 Salvage for chronic heel pain plantar fasciotomy, nerve release, neurectomy, vein wrap and nerve stimulator. to the Israeli Orthopaedic Foot & Ankle Society (IOFAS), Tel Hashomer, Israel

8/15/97 Ballet dancers' injuries: assessment and management. to the Israeli Orthopaedic Foot & Ankle Society (IOFAS), Tel Hashomer, Israel

2/14/98 Orthopaedic evaluation and surgical treatment of foot and ankle injuries in dancers. Boston Combined Sections Meeting, American Physical Therapy Association, Boston, MA

3/7/98 Evaluating the lower kinetic chain in dancers. Dance Medicine, 8th Annual Symposium, Towson, MD

4/23/98 Overuse syndromes among aerobic dance participants. Pennsylvania Orthopaedic Society, Orlando, FL

6/9/98 Peripheral nerve stimulation for intractable pain. Bethesda Spinal Research Foundation Lecture, Bethesda, MD

8/30/98 A new fixation method for fibula fractures in elderly patients: A biomechanical evaluation with clinical correlation. Smith and Nephew Residents' Conference, Memphis, TN

8/24/98 Immediate post-op prosthesis for below-knee amputees. Miller Orthopaedic Clinic, Carolinas Medical Center, Charlotte, NC

9/98 Immediate post-operative prosthesis for below-knee amputees. NovaCare, Sabolich Center, Oklahoma City, OK

9/16/98 Charcot midfoot. COMFAS Meeting, Venice, Italy

9/17/98 Management of severe intractable lower extremity pain with peripheral nerve vein wrapping or peripheral nerve stimulation. COMFAS Meeting, Venice, Italy \

9/18/98 Preliminary results of peripheral nerve stimulation. International Neuromodulation Society Meeting, Lucerne, SwitzerlandI

9/28/98 mmediate post-operative prosthesis for below-knee amputees. NovaCare Prosthetic Meeting, Phoenix, AZ

10/22/98 Immediate post-operative prosthesis for below-knee amputees. NovaCare Prosthetic Meeting, Orlando, FL

10/22/98 Lower extremity amputations: Surgical considerations. NovaCare Prosthetic Meeting, Orlando, FL

10/23/98 Triple arthrodesis. Hospital for Joint Disease Orthopaedic Institute (HJDOI) Alumni Scientific Meeting, New York, NY

10/23/98 Isolated subtalar fusion. Hospital for Joint Disease Orthopaedic Institute (HJDOI) Alumni Scientific Meeting, New York, NY

1998 An extensive plantar exposure of the midfoot for treatment of the rocker-bottom deformity. Orthopaedic Clinics Society, Kansas City, KS

1/26/99 Pitfalls & advances in lower extremity amputations. University of Texas Medical Branch, Shriner’s Hospital Conference, Galveston, TX

3/5/99 Infections of the foot and ankle. Guest speaker to the AMA Student Section and the Student Osteopathic Surgery Association, University of Health Sciences, Kansas City, MI

3/5/99 Nerve disorders of the foot and ankle. Guest speaker, AMA Student Section and the Student Osteopathic Surgery Association, University of Health Sciences, Kansas City, MI

3/5/99 Peripheral neuroanatomy and technique for peripheral nerve stimulation. Guest speaker, AMA Student Section and the Student Osteopathic Surgery Association, University of Health Sciences, Kansas City, MI

3/7/99 Overview of foot and ankle research in dance at Union Memorial Hospital. 9th Annual Dance Symposium, Goucher College, Baltimore, MD

3/13/99 Universal immediate or early post-op prosthesis for below-knee amputees. Union Memorial Hospital Foot and Ankle Fellowship Reunion Weekend, Telluride, CO

4/18/99 Transpedal multiplanar wedge osteotomy. SICOT Meeting, Sydney, Australia

4/18/99 Subtalar arthrodesis. SICOT Meeting, Sydney, Australia

4/18/99 Chronic nerve pain. SICOT Meeting, Sydney, Australia

4/18/99 Pedobarographic analysis of releve. SICOT Meeting, Sydney, Australia

4/21/99 Reconstruction for rheumatologic disorders of the foot and ankle. D.C. Rheumatism Society Lecture, Washington, DC

6/6/99 Charcot foot management. Meeting & Exposition of the American Physical Therapy Association, Washington, DC

6/6/99 Treatment of the diabetic foot. Meeting & Exposition of the American Physical Therapy Association, Washington, DC

6/27/99 Overuse injuries among step aerobics dance participants. Performing Arts Medicine Association, Aspen, CO

7/14/99 The Airlimb an early or immediate post-operative prosthesis. INTERBOR Meeting, Boston, MA

7/14/99 Transtibial amputation: Surgical technique (video). INTERBOR Meeting, Boston, MA

9/30/99 Reconstruction for Charcot foot & ankle. Challenges in Foot and Ankle Reconstruction Course, Inova Institute of Research & Education, Fairfax, VA

9/30/99 Advances in rheumatic foot & ankle surgery: The rheumatoid forefoot. Challenges in Foot and Ankle Reconstruction Course, Inova Institute of Research & Education, Fairfax, VA

10/8/99 Charcot Foot & Ankle. Medlantic Teaching Seminar, Baltimore, MD

10/11/99 Controversies in the surgical management of the diabetic foot. (Symposium) Charcot reconstructions. 85th Annual Clinical Congress of the American College of Surgeons, San Francisco, CA

10/12/99 Salvage for complex foot & ankle trauma. Orthopaedic Conference, San Francisco General, San Francisco, CA

10/16/99 Charcot foot & ankle. Greek Orthopaedic Society, Athens, Greece

10/16/99 Post operative treatment of amputees. Greek Orthopaedic Society, Athens, Greece

10/17/99 Charcot reconstructions. National Continuing Medical Education, Tel Aviv, Israel

10/18/99 Reconstructions of complex foot & ankle trauma. Ramban Hospital, Haifa, Israel

10/18/99 Surgical perspective for transtibial amputees. Ramban Hospital, Haifa, Israel

10/18/99 Neurostimulator & nerve reconstruction for chronic nerve pain. Ramban Hospital, Haifa, Israel

10/22/99 Surgical considerations for transtibial amputations. Northwestern University Orthotics & Prosthetic Program, Chicago, IL

12/4/99 Charcot foot and ankle. 7th Annual International Symposium for Foot Surgery, Vienna, Austria

12/4/99 Complex foot & ankle cases. 7th Annual International Symposium for Foot Surgery, Vienna, Austria

12/99 MRI Imaging of superior peroneal retinacular injuries. Radiologic Society of North America

12/10/99 Surgical considerations for transtibial amputations. Newington Orthotics & Prosthetics Program, Newington, CT

4/25/00 Application of ring external fixator. Foot and Ankle Symposium, Melbourne, Australia

4/25/00 Charcot reconstruction. Foot and Ankle Symposium, Melbourne, Australia

4/26/00 Treatment and advances in peripheral neurostimulation: Retrospective and prospective results of peripheral nerve stimulator for chronic lower extremity neuralgia. George Hospital Campus Foot and Ankle Service, Foot and Ankle Symposium, Sydney, Australia

4/28/00 Tarsal tunnel syndrome. St. George Hospital Campus Foot and Ankle Service, Foot and Ankle Symposium, Sydney, Australia

4/28/00 Recent advances and treatment of chronic lower extremity neuralgia. St. George Hospital Campus Foot and Ankle Service, Foot and Ankle Symposium, Sydney, Australia

4/28/00 Nerve entrapment and conditions in the athlete. St. George Hospital Campus Foot and Ankle Service, Foot and Ankle Symposium, Sydney, Australia

4/29/00 Recent advances in the management of diabetic feet. St George Hospital Campus Foot and Ankle Service, Foot and Ankle Symposium, Sydney, Australia

4/29/00 Total contact casting. St. George Hospital Campus Foot and Ankle Service, Foot and Ankle Symposium, Sydney, Australia

5/7/00 Charcot foot and ankle: Classification and reconstruction. American College of Foot and Ankle Surgeons, New York, NY

5/20/00 Postoperative management of transtibial amputation. National Association of Orthopaedic Nurses, Denver, CO

5/31/00 Mobilization following forefoot surgery reasoning for special shoes in post-operative mobilization. Orthopaedic + Reha-Technik World Congress, Leipzig, Germany

5/31/00 Influence of the shoe on weight relief for the foot. Orthopaedic + Reha-Technik World Congress, Leipzig, Germany

5/31/00 Immediate postoperative prosthesis protocol following transtibial amputation-a prospective study. Orthopaedic + Reha-Technik World Congress, Leipzig, Germany

6/00 Postoperative care of transtibial amputees. Georgetown Medical Center, Washington, DC

6/15/00 Surgery for the amputee. EFAS 3rd Congress, Christian, Sweden

6/18/00 A prospective analysis of peripheral nerve stimulation for intractable lower extremity nerve pain. IFESS 2000 Conference, Aalborg, Denmark

9/6/00 Evaluation of a prefabricated adjustable postoperative prosthesis for transtibial amputees: A prospective clinical study. 2nd Orthopaedic Department, 401 General Military of Athens, Athens, Greece

9/14/00 Prospective study on IPOP for transtibial amputations. Balkan’s Military Congress, Ankara, Turkey

9/15/00 The use of the immediate postoperative prosthesis Airlimb type in the below knee amputees. 2nd Orthopaedic Department, 401 General Military of Athens , Athens, Greece

10/6/00 A prospective analysis of peripheral nerve stimulation for intractable lower extremity nerve pain. The Alumni Association of NYUHJD 2000 Scientific Program and the Sir Robert Jones Lecture, New York, NY

3/14/01 Implantable electric bone stimulation for foot and ankle reconstruction (video). Foot & Ankle Alumnus Meeting, Telluride, CO

5/11/01 Chronic, symptomatic os navicular synchondrosis injuries. North American Foot and Ankle Association Meeting, Louisville, KY

5/18/01 Charcot reconstruction. Orthopaedic Foot Club Meeting, Kalamazoo, MI

6/6/01 The results of treatment of Stage II posterior tibial tendon rupture with flexor digitorum longus tendon transfer and calcaneal osteotomy. EFFORT 5th Congress of the European Federation of National Associations of Orthopaedics and Traumatology, Rhodes, Greece

6/7/01 A prospective clinical study of transtibial amputees using a prefabricated adjustable postoperative prosthesis and early controlled ambulation. EFFORT 5th Congress of the European Federation of National Associations of Orthopaedics and Traumatology, Rhodes, Greece

6/7/01 Biomechanical assessment of a prefabricated pneumatic adjustable postoperative prosthesis and a rigid total contact prosthetic. EFFORT 5th Congress of the European Federation of National Associations of Orthopaedics and Traumatology, Rhodes, Greece

6/22/01 A prospective clinical study of transtibial amputees using a prefabricated adjustable postoperative prosthesis and early controlled ambulation. Annual Conference and Exposition of the American Physical Therapy Association, Anaheim, CA

7/2/01 Biomechanical assessment of a prefabricated pneumatic adjustable postoperative prosthesis and a rigid total contact prosthetic. The 10th World Congress of the International Society for Prosthetics and Orthotics, Glasgow, Scotland

7/2/11 Efficacy of a new pressure-sensitive alarm for clinical use in orthopaedics. The 10th World Congress of the International Society for Prosthetics and Orthotics, Glasgow, Scotland

7/2/01 A prospective clinical study of transtibial amputees using a prefabricated adjustable postoperative prosthesis and early controlled ambulation. The 10th World Congress of the International Society for Prosthetics and Orthotics, Glasgow, Scotland

7/2/01 Biomechanical evaluation of the ability of casts and braces to immobilize the ankle and hindfoot. The 10th World Congress of the International Society for Prosthetics and Orthotics, Glasgow, Scotland

3/8/02 Foot and ankle problems in dancers. Dance Medicine, Injury Recognition Treatment Prevention Course, Orlando, FL

3/21/02 Surgical techniques for below knee amputation. Northwestern O&P Certificate Program, Rehab Institute of Chicago, Chicago, IL

4/19/02 External Fixation for Salvage Reconstruction Surgery – A Retrospective Review. Orthopaedic Foot Club, Memphis, TN

11/19/02 Complex Foot & Ankle Cases. The Wisconsin Foot and Ankle Club, Milwaukee, IL

11/18/02 Charcot Neuropathy: Treatment and management of Charcot foot. Gunderson Lutheran Hospital, Medical Education Conference, Wisconsin Orthopaedic Foot & Ankle Club, Wisconsin, IL

3/30/03 Surgery of the Charcot foot. 5th International Meeting of the Austrian Foot Society, Going, AustriA

4/1/03 Supplementary axial and inter-metatarsal k-wire fixation for Ludloff metatarsal osteotomy. 5th International Meeting of the Austrian Foot Society, Going, Austria

4/25/03 Complex Charcot challenge. Orthopaedic Foot Club Meeting, Baltimore, MD

5/30/03 The immediate pneumatic post-op prosthetic. American Academy of Orthotists and Prosthetists 2nd Clinical Standards of Practice Conference, Alexandria, VA

9/17/03 Application of foot and ankle ring fixators. University of Iowa, Department of Orthopaedics, Iowa

9/19/03 Ankle allograft. North American Foot & Ankle Association Annual Meeting, University of Iowa, Department of Orthopaedics, Iowa

9/20/03 FDL transfer for chronic peroneal tendon ruptures. North American Foot & Ankle Association Annual Meeting, University of Iowa, Department of Orthopaedics, Iowa

9/20/03 Charcot. North American Foot & Ankle Association Annual Meeting, University of Iowa, Department of Orthopaedics, Iowa

11/08/03 Experiences with early fitting and alternative devices. ISPO Meeting, Zwolle, Netherlands

4/23/04 Complex Charcot challenge. Orthopaedic Foot Club Meeting, Baltimore, MD

5/5/04 Peroneal groove deepening Procedure. North American Foot and Ankle Association, Baltimore, MD

6/15/3 A prospective analysis of an immediate postoperative prosthesis. EFAS 3rd Congress, Stockholm, Sweden

6/16/03 A prospective analysis of peripheral nerve stimulation for intractable lower extremity nerve pain. EFAS EFAS 3rd Congress, Stockholm, Sweden

6/17/03 A biomechanical analysis of an immediate postoperative prosthesis. EFAS 3rd Congress, Stockholm, Sweden

5/20/04 Allograft ankle transplant. Orthopaedic Foot Club, Philadelphia PA

10/24/04 The ankle in dance: An anatomic perspective. Annual Dance Medicine Symposium, Goucher College, Towson, MD

10/24/04 The foot in motion: How the foot reacts to the rigors of dance. Goucher College Department of Dance, Towson, MD

12/12/04 Treatment approach to Charcot. DePuy Clinical Concepts: External Fixation in the Lower Extremity, Chicago, IL

12/12/04 Midfoot Charcot reconstruction. DePuy Clinical Concepts: External Fixation in the Lower Extremity, Chicago, IL

12/12/04 Static vs. dynamic compression in Charcot management. DePuy Clinical Concepts: External Fixation in the Lower Extremity, Chicago, IL

12/12/04 Application of midfoot Charcot frame. DePuy Clinical Concepts: External Fixation in the Lower Extremity, Chicago, IL

1/27/05 Update on Foot and Ankle Research. Foot and Ankle Fellowship Reunion, Snowbird, Salt Lake City, Utah

10/21/05 Adjuvant procedures for posterior tibial tendon dysfunction. Annual Meeting Orthopaedic Foot Club, Charlotte, NC

3/11/06 External fixation for the salvage of severe lower extremity foot and ankle conditions. Japanese Orthopaedic Society Meeting, Yokohama, Japan

3/12/06 Treatment of trauma cases with external fixation. Japanese Orthopaedic Society Meeting, Yokohama, Japan

5/12/06 PTTD: Biomechanical perspective. NAFAA , Cleveland, OH

10/13/06 Correction with distal osteotomy (Akin, Chevron). Nexa Orthopaedics, Napa Foot and Ankle Symposium, Napa, CA

10/13/06 Anterior tibial tendon and FHL disorders. Nexa Orthopaedics, Napa Foot and Ankle Symposium, Napa, CA

10/13/06 Stage 2 PTT dysfunction: Surgical options and indications including arthroereisis. Nexa Orthopaedics, Napa Foot and Ankle Symposium, Napa, CA

10/22/06 Performing with Pain: A foot and ankle perspective. Performing Arts Committee and Goucher College Dance Department Program, Dance: A living art, Baltimore, MD

3/15/07 Reconstruction of hindfoot deformity: Case presentations. Baltimore Alumni Foot and Ankle Meeting, Institute for Foot & Ankle Reconstruction at Mercy and Union Memorial Hospital, Steamboat, CO

3/16/07 Processed bone marrow aspirate to augment complex fusions. Baltimore Alumni Foot and Ankle Meeting, Institute for Foot & Ankle Reconstruction at Mercy and Union Memorial Hospital; Steamboat, CO

5/18/07 Ankle arthrodesis for salvage of large articular defects. Orthopaedic Foot Club, Pittsburgh, PA

6/16/07 Surgical treatment of the diabetic foot and ankle: Ulcers, infection and Charcot. Yonsei Symposium, Yonsei University, Seoul, Korea

6/16/07 Ankle Allograft. Yonsei Symposium, Yonsei University, Seoul, Korea

2/24/08 The role of biologic agents in a foot and ankle practice. North American Foot & Ankle Association’s 20th Annual Meeting, New Orleans, LA

6/20/08 Sports injuries of the foot and ankle. Multiple lecture series. The Japanese Society for Surgery of the Foot Annual Meeting, Shinjuku-city, Tokyo, Japan

7/18/08 Rheumatologic pathology of the foot and ankle. Rheumatic Foot Symposium, Colombian Society of Orthopaedic Surgery and Trauma (SCCOT), Armenia, Colombia

7/18/08 Surgical treatment of the midfoot and forefoot. Rheumatic Foot Symposium, Colombian Society of Orthopaedic Surgery and Trauma (SCCOT), Armenia, Colombia

7/19/08 Surgical treatment of the hindfoot and ankle. Rheumatic Foot Symposium, Colombian Society of Orthopaedic Surgery and Trauma (SCCOT), Armenia, Colombia

7/19/08 Internal fixation of the Charcot foot and ankle. Diabetes Symposium, Colombian Society of Orthopaedic Surgery and Trauma (SCCOT), Armenia, Colombia

7/19/08 Surgical treatment of infected Charcot. Diabetes Symposium, Colombian Society of Orthopaedic Surgery and Trauma (SCCOT), Armenia, Colombia

7/19/08 Surgical treatment of midfoot and hindfoot deformities with plantar plate: Results of 250 cases. Diabetes Symposium, Colombian Society of Orthopaedic Surgery and Trauma (SCCOT), Armenia, Colombia

7/19/08 Surgical treatment of foot and ankle deformities with external fixation in 85 cases. Diabetes Symposium, Colombian Society of Orthopaedic Surgery and Trauma (SCCOT), Armenia, Colombia

9/17/08 Strength comparison of a graft augmented Achilles tendon repair. Orthopaedic Educational Luncheon, Union Memorial Hospital, Baltimore, MD

9/27/08 Advances in treating foot and ankle tendon injuries. 96th Annual Meeting, The Clinical Orthopaedic Society, Annapolis, MD

11/19/08 Correction of severe acquired flexible flatfoot with rotational and medializing calcaneal osteotomy and flexor digitorum longus transfer. Presented at the Orthopaedic Educational Luncheon, Union Memorial Hospital, Baltimore, MD

11/19/08 Accuracy of therapeutic injection in the treatment of plantar fasciitis and interdigital neuroma. Presented at the Orthopaedic Educational Luncheon, Union Memorial Hospital, Baltimore, MD

11/19/08 urgical management of Charcot foot and ankle. British Orthopaedic Foot and Ankle Society Annual Scientific Meeting, Liverpool, England

11/20/08 Sports injuries of the subtalar complex. British Orthopaedic Foot and Ankle Society Annual Scientific Meeting, Liverpool, England

2/26/09 Ankle arthritis: Thinking deeper inside and outside the box. Instructional Course: Emerging Methods for Treating Ankle Arthritis. AAOS Annual Meeting, Las Vegas, NV

2/28/09 Second toe amputation. Symposium II on Cross over second toe. AOFAS Specialty Day at AAOS Annual Meeting, Las Vegas, NV

3/12/09 Biologic adjuvants: Bone marrow, BMP, and PDGF. Baltimore Fellows Foot & Ankle Meeting, Steamboat Springs, CO

3/12/06 Osteoarticular allograft replacement. Baltimore Fellows Foot & Ankle Meeting, Steamboat Springs, CO

3/14/09 Structural faults. Baltimore Fellows Foot & Ankle Meeting, Steamboat Springs, CO

3/18/09 Biomechanical investigation of hallux varus reconstruction using the abductor hallucis tendon: a comparison of two methods. Orthopaedic Educational Luncheon, Union Memorial Hospital, Baltimore, MD

3/18/09 Biomechanical investigation of hallux varus reconstruction: Biotenodesis abductor hallucis tendon transfer versus mini TightRope. Orthopaedic Educational Luncheon, Union Memorial Hospital, Baltimore, MD

4/8/09 Effect of extracorporeal shock wave therapy on cultured tenocytes. Presented as a Media Release by the American Orthopaedic Foot and Ankle

5/7/09 A different twist on the calcaneal fracture. NAFAA 21st Annual Meeting, San Diego, CA

6/19/09 Ankle ligamentous instability and its treatment. Washington Hospital Center, Washington, DC

6/25/09 Posterior mechanical reinforcement of a standard Krackow Achilles tendon repair using a new xenograft scaffold. 5th Annual Visiting Professor Lectureship Conference, Union Memorial Hospital, Baltimore, MD

6/25/09 Biomechanical investigation of hallux varus reconstruction using the abductor hallucis tendon: A comparison of two methods. 5th Annual Visiting Professor Lectureship Conference, Union Memorial Hospital, Baltimore, MD

6/25/09 Biomechanical investigation of hallux varus reconstruction: Biotenodesis abductor hallucis tendon transfer versus mini TightRope. 5th Annual Visiting Professor Lectureship Conference, Union Memorial Hospital, Baltimore, MD

6/25/09 Correction of severe acquired flexible flatfoot with rotational and medializing calcaneal osteotomy and flexor digitorum longus transfer. 5th Annual Visiting Professor Lectureship Conference, Union Memorial Hospital, Baltimore, MD

6/25/09 Crossed screws versus dorsomedial locking plate with compression screw for first metatarsocuneiform arthrodesis: A cadaver study. 5th Annual Visiting Professor Lectureship Conference, Union Memorial Hospita, Baltimore, MD

6/26/09 Rotational and medializing calcaneal osteotomy for correction of acquired flatfoot deformity: A cadaver model.Union Memorial Hospital, Department of Orthopaedic Surgery, Baltimore, MD

7/15/09 Alterations in cytoskeletal gene expression in normal and degenerate human tendon cells following cyclic strain. Presented at the AOFAS Annual Summer Meeting, Vancouver, BC

9/11/09 Advances in treating tendon disorders of the foot and ankle. The Rose Lectureship, New York Presbyterian Hospital, Hospital for Special Surgery, New York, NY

9/25/09 Design rationale of a new ankle replacement. Orthopaedic Foot Club Annual Meeting, Washington, DC

10/2/09 Practical approaches to common office foot problems. Topics in Clinical Rheumatology. The Mary Betty Stevens, M.D., Memorial Arthritis Update, Arthritis Foundation, Maryland Chapter, Towson, MD

11/8/09 Growth factors and bone marrow concentrate (cells and factors) and their role in healing for fusions, non-unions, complex cases, and high-risk situations. 94th Italian Orthopaedic Society Congress, Meeting of the Italian Society of the Ankle and Foot, Milan, Italy

12/7/09 Current methods of induction and stimulation in bone healing. Brazilian Foot and Ankle Society Meeting, Mistral Ship, Brazil

12/8/09 Ankle Pathology. Round Table, Brazilian Foot and Ankle Society Meeting, Mistral Ship, Brazil

12/8/09 Advances in the treatment of tendon injuries. Brazilian Foot and Ankle Society Meeting, Mistral Ship, Brazil

12/9/09 Nerve compressions about the foot and ankle. Brazilian Foot and Ankle Society Meeting, Mistral Ship, Brazil

12/9/09 Difficulties in several diagnoses and undervalued pathologies. Brazilian Foot and Ankle Society Meeting, Mistral Ship, Brazil

12/10/09 How I treat plantar plate lesions, bunionette deformities, and sesamoiditis. Brazilian Foot and Ankle Society Meeting, Mistral Ship, Brazil

12/10/09 Critical study of different methods of fixation in arthrodeses of the foot and ankle. Brazilian Foot and Ankle Society Meeting, Mistral Ship, Brazil

12/10/09 Hallux valgus. Round Table, Brazilian Foot and Ankle Society Meeting, Mistral Ship, Brazil

12/11/09 Foot and ankle injuries. Round Table, Brazilian Foot and Ankle Society Meeting, Mistral Ship, Brazil

12/11/09 Internal vs. external fixation. Debate, Brazilian Foot and Ankle Society Meeting, Mistral Ship, Brazil

12/11/09 Acquired flatfoot: Arthrodesis vs. lengthening calcaneal osteotomy vs. sliding medial osteotomy. Brazilian Foot and Ankle Society Meeting, Mistral Ship, Brazil

12/11/09 Morton’s neuroma: Primary and secondary neurectomies. Brazilian Foot and Ankle Society Meeting, Mistral Ship, Brazil

12/11/09 Trauma in Sports. Round Table, Brazilian Foot and Ankle Society Meeting, Mistral Ship, Brazil

12/11/09 Ankle sprains in athletes and associated injuries. Brazilian Foot and Ankle Society Meeting, Mistral Ship, Brazil

1/20/10 Differential lateral forefoot pressures with triple arthrodesis versus subtalar and talonavicular arthrodesis. Orthopaedic Educational Luncheon, Union Memorial Hospital, Baltimore, MD

2/15/10 Dance: An orthopaedic lower extremity perspective. Towson University Center for Arts, Towson, MD

4/24/10 A biomechanical comparison of lateral malleolar fixation constructs in an osteoporotic model. 69th Annual Meeting of the Maryland Orthopaedic Association (MOA), Baltimore, MD

5/12/10 Stem cell incorporating suture. Orthopaedic Educational Luncheon, Union Memorial Hospital, Baltimore, MD

6/10/10 Xenograft scaffold full-wrap reinforcement of Krackow Achilles tendon repair: A biomechanical study. 6th Annual Visiting Professor Lectureship Conference, Union Memorial Hospital, Baltimore, MD

6/10/10 Biomechanical rationale for the calcaneocuboid sparing modified double arthrodesis. 6th Annual Visiting Professor Lectureship Conference, Union Memorial Hospital, Baltimore, MD

6/10/10 Plantar and calcaneocuboid pressure in two- versus three-column midfoot fusion: A biomechanical study. 6th Annual Visiting Professor Lectureship Conference, Union Memorial Hospital, Baltimore, MD

7/7/10 Plantar and calcaneocuboid pressure in two- versus three-column midfoot fusion: A biomechanical study. AOFAS 26th Annual Summer Meeting, Baltimore, MD

9/29/10 Distal tibial resection plafondplasty for talar dome osteochondral lesion exposure. Orthopaedic Educational Luncheon, Union Memorial Hospital, Baltimore, MD

9/29/10 Metabolic profiling and cytokine analysis of the synovial fluid in healthy early-stage and end-stage post-traumatic ankle joints. Orthopaedic Educational Luncheon, Union Memorial Hospital, Baltimore, MD

2010 Intelligent surgical drill for training in arthrodesis procedures. Collegiate Inventors Competition, Washington, DC

10/22/10 Reconstruction of the Charcot foot and ankle. V Curso de Actualización en Cirugía de Pie y Tobillo, Barcelona, Spain

10/22/10 Reemplazo lateral de tobillo: Biología única y soluciones biomecánicas (Lateral replacement of ankle: Unique Biology and biomechanic solutions). V Curso de Actualización en Cirugía de Pie y Tobillo, Barcelona, Spain

10/22/10 Advances in tibial posterior reconstruction. V Curso de Actualización en Cirugía de Pie y Tobillo, Barcelona, Spain

10/22/10 Uso de concentrado de médula ósea en reconstrucción de pie y tobillo (BMA for foot and ankle reconstruction). V Curso de Actualización en Cirugía de Pie y Tobillo, Barcelona, Spain

12/1/10 Achilles tendon: Greek myth and beyond. 30th Annual Meeting of the Israeli Orthopedic Association, Jerusalem, Israel

12/1/10 Arthroereisis. 30th Annual Meeting of the Israeli Orthopedic Association, Jerusalem, Israel

12/2/10 Calcaneal Fractures: A subtalar approach. 30th Annual Meeting of the Israeli Orthopedic Association, Jerusalem, Israel

3/9/11 Dilemmas, dreams, delusions, designs and devices: Update on advances from UMH. 2011 Baltimore Alumni Meeting, Breckenridge, CO

3/9/11 Debate: TTC or isolated ankle arthrodesis? 2011 Baltimore Alumni Meeting, Breckenridge, CO

3/10/11 Clinical results of biologically-enhanced torn tendon/enthesis reconstructions. 2011 Baltimore Alumni Meeting, Breckenridge, CO

3/11/11 Biologic treatments of Achilles disorders: Does better follow good? 2011 Baltimore Alumni Meeting, Breckenridge, CO

4/28/11 Demonstration: EDB tendon transfer. NAFAA, St Louis, MO

4/28/11 ***B***iologically ***E***nhanced ***T***orn ***T***endon / ***E***nthesis ***R***econstructions:  Is this ***BETTER***? NAFAA, St Louis, MO

5/19/11 Advances in foot and ankle. National Association of Orthopaedic Nurses, Baltimore, MD

6/23/11 Efficacy of a mesenchymal stem cell-loaded suture on rat Achilles tendon healing. 7th Annual Visiting Professor Lectureship, Union Memorial Hospital, Baltimore, MD

6/23/11 Distal tibial resection plafondplasty for talar dome osteochondral lesion exposure. 7th Annual Visiting Professor Lectureship, Union Memorial Hospital, Baltimore, MD

9/9/11 Stage IV flatfoot deformity. 3rd Foot and Ankle Symposium: Arthritic Disorders of the Foot and Ankle: Diagnosis and Management. Department of Orthopaedics, University of Zurich, Balgrist, Switzerland

9/9/11 Chopart arthrosis: talonavicular joint always isolated or combined with CC joint? 3rd Foot and Ankle Symposium: Arthritic Disorders of the Foot and Ankle: Diagnosis and Management. Department of Orthopaedics, University of Zurich, Balgrist, Switzerland

9/9/11 Lisfranc IV-V arthrosis. 3rd Foot and Ankle Symposium: Arthritic disorders of the foot and ankle: Diagnosis and management. Department of Orthopaedics, University of Zurich, Balgrist, Switzerland

10/28/11 Hindfoot fusions: Talonavicular, subtalar, calcaneocuboid and combinations: Biomechanical and clinical rationale. Orthopaedic Foot Club Meeting, Hanover, NH

1/20/12 Approach and management to nonunions of the foot and ankle, including bone stimulation and biologics. Third Annual Indo-US Foot and Ankle Course, Delhi, India

1/20/12 Tibiotalocalcaneal fusions: Techniques and tips. Third Annual Indo-US Foot and Ankle Course, Delhi, India

1/20/12 Ankle arthritis: Distraction arthroplasty. Third Annual Indo-US Foot and Ankle Course, Delhi, India

1/20/12 Recent concepts in the management of ankle fractures and syndesmotic injuries. Third Annual Indo-US Foot and Ankle Course, Delhi, India

1/21/12 Operative management of adult flat foot deformity. Third Annual Indo-US Foot and Ankle Course, Delhi, India

1/22/12 Live Surgical Demonstrations: 1. Ankle arthroscopy for OCD 2. Revision Triple Arthrodesis. Third Annual Indo-US Foot and Ankle Course, Delhi, India

1/22/12 Prosthetics and orthotics in foot and ankle. Third Annual Indo-US Foot and Ankle Course, Delhi, India

1/22/12 Diagnostic and therapeutic subtalar arthroscopy: Techniques and tips. Third Annual Indo-US Foot and Ankle Course, Delhi, India

2/6/12 Dance: An orthopaedic lower extremity perspective. Towson University Center for the Arts, Towson, MD

4/21/12 Biomechanical comparison of two ankle arthrodesis techniques: A posteriorly applied blade plate vs. crossed screws. 71st Annual Meeting of the Maryland Orthopaedic Association (MOA), 1st Baltimore, MD

4/21/12 Computed tomography analysis of third webspace injections for interdigital neuroma. 71st Annual Meeting of the Maryland Orthopaedic Association (MOA), 1st Baltimore, MD

5/3/12 Incoming AOFAS presidential presentation. AOFAS Advanced Foot and Ankle Course, Chicago, IL

5/4/12 Recognition of AOFAS member contributions: A tribute to Fred Lippert. AOFAS Advanced Foot and Ankle Course, Chicago, IL

5/31/12 Proximal phalangeal shortening. NAFAA Meeting, Rapid City, SD

6/20/12 Stem cell loaded sutures improve Achilles tendon healing and repair strength in a rat model. AOFAS summer meeting, San Diego, CA

6/21/12 Treatment of osteochondral lesions in the ankle with a particulated juvenile cartilage allograft: Mid-term outcomes in a challenging clinical population. AOFAS summer meeting, San Diego, CA

6/21/12 Minimally invasive approach to calcaneal fractures. AOFAS Summer Meeting, San Diego, CA

6/22/12 Computed tomography analysis of third webspace injections for interdigital neuroma. AOFAS summer meeting, San Diego, CA

6/28/12 The effect of mesenchymal stem cell embedded mesh on rat Achilles defects. 8th Annual Visiting Professor Lectureship Conference, MedStar Union Memorial Hospital, Baltimore, MD

6/28/12 Computed tomography analysis of third webspace injections for interdigital neuroma. 8th Annual Visiting Professor Lectureship Conference, MedStar Union Memorial Hospital, Baltimore, MD

6/28/12 Biomechanical comparison of two ankle arthrodesis techniques: a posteriorly applied blade plate vs. crossed screws, 8th Annual Visiting Professor Lectureship Conference, MedStar Union Memorial Hospital, Baltimore, MD

7/21/12 The synovial fluid of post-traumatic ankle arthritis holds many potential inflammatory cytokine and metabolite biomarkers, SAO Annual Meeting, San Francisco, CA

8/27/12 Subtalar approach for calcaneal fractures. Australian Orthopaedics Foot and Ankle Society Conference, Sydney, Australia

8/28/12 Subtalar approach for calcaneal fractures. Australian Orthopaedics Foot and Ankle Society Conference, Melbourne, Australia

8/29/12 Subtalar approach for calcaneal fractures. Cadaver Lab. Australian Orthopaedics Foot and Ankle Society Conference, Hobart Tasmania, Australia

8/30/12 The role of orthobiologics in foot and ankle reconstructions. Australian Orthopaedics Foot and Ankle Society Conference, Hobart Tasmania, Australia

8/30/12 Dance and sports injuries of the foot and ankle. Australian Orthopaedics Foot and Ankle Society Conference, Hobart Tasmania, Australia

8/30/12 Advances in tibia post reconstruction. Australian Orthopaedics Foot and Ankle Society Conference, Hobart Tasmania, Australia

9/6/12 Lateral approach for ankle reconstructions. 2nd Foot and Ankle Course, Ciudad de Medellin, Columbia

9/6/12 Sport /dance injuries of the foot and ankle. 2nd Foot and Ankle Course, Ciudad de Medellin, Columbia

9/7/12 Talar chondral lesions treated with juvenile allograft. 2nd Foot and Ankle Course, Ciudad de Medellin, Columbia

9/7/12 The Variations of the hindfoot fusion and a biomechanical treatment algorithm. 2nd Foot and Ankle Course, Ciudad de Medellin, Columbia

9/8/12 Crossfire: Triple artrodesis- artrodesis selectivas. 2nd Foot and Ankle Course, Ciudad de Medellin, Columbia

9/8/12 Subtalar approach for calcaneal fractures. 2nd Foot and Ankle Course, Ciudad de Medellin, Columbia

9/8/12 Crossfire: Transferencia tendinosa FHL almuñón vs al navicular. 2nd Foot and Ankle Course, Ciudad de Medellin, Columbia

9/8/12 Crossfire: osteotomia calcaneo sola vs. osteotomia +transferencia tendinosa para ITTP. 2nd Foot and Ankle Course, Ciudad de Medellin, Columbia

9/8/12 Lesser toe deformities. 2nd Foot and Ankle Course, Ciudad de Medellin, Columbia

9/8/12 Crossfire: Osteotomía metatarsianos2nd Foot and Ankle Course, Ciudad de Medellin, Columbia

9/23/12 Subtalar joint sports injuries. Foot and Ankle Course, Shanghai, China

9/24/12 Latest advances in treating Achilles tendon pathology. Foot and Ankle Course, Shanghai, China

9/25/12 Peroneal tendon surgery in the athlete. Foot and Ankle Course, Shanghai, China

9/26/12 Ankle ligament stabilization with the periosteal flap modification. Foot and Ankle Course, Shanghai, China

10/5/12 Efficacy of mesenchymal stem cell loaded surgical mesh in tendon repair in rats. 5th Annual Maryland Stem Cell Symposium, Annapolis, MD

11/17/12 Lateral ankle replacement. Laboratory and lecture for the Zimmer Institute, Chicago, IL

12/12/12 Denovo Zimmer Event. SOMOS meeting, Naples, FL

12/14/12 Design rational for ankle replacements. Zimmer Institute, Chicago, IL

1/26/13 Zimmer trabecular metal total ankle. Zimmer Institute, Denver, CO

2/9/13 Zimmer trabecular metal total ankle. Zimmer Institute, San Antonio, TX

2/14/13 Forefoot papers. Moderator, Baltimore Fellows Foot & Ankle Meeting, Breckenridge, CO

2/15/13 Foot and ankle: Challenges in the future. Baltimore Fellows Foot & Ankle Meeting, Breckenridge, CO

2/23/13 Zimmer trabecular metal total ankle. Zimmer Institute, Charlotte, NC

3/16/13 Zimmer trabecular metal total ankle. Zimmer Institute, Parsipanny, NJ

3/20/13 Potential cytokineand metabolite biomarkers of post-traumatic ankle arthritis synovial fluid, AAOS Annual Meeting, Chicago, IL

4/7/13 Zimmer trabecular metal total ankle. Zimmer Institute, Houston, TX

6/8/13 Zimmer Trabecular Metal Total Ankle. Zimmer Institute, Denver, CO

8/24/13 Zimmer Trabecular Metal Total Ankle Expert Interactions, Zimmer Institute, Miami, FL

10/25/13 Zimmer Trabecular Metal Total Ankle Expert Interactions, Zimmer Institute, Whippany, NJ

11/14/13 Early Clinical Results Using the Zimmer Trabecular Metal Total Ankle. Zimmer Institute, Philadelphia, PA

11/21/13 Halux valgus treatment. First Chilean Congress of Foot and Ankle, Vina Del Mar, Chile

11/21/13 Lesser toes deformities. Chilean Congress of Foot and Ankle, Vina Del Mar, Chile

11/22/13 Advances in Achilles tendinopathy. Chilean Congress of Foot and Ankle, Vina Del Mar, Chile

11/22/13 Dance injuries. Chilean Congress of Foot and Ankle, Vina Del Mar, Chile

11/22/13 Diabetic foot treatment. Chilean Congress of Foot and Ankle, Vina Del Mar, Chile

11/23/13 Charcot reconstruction. Chilean Congress of Foot and Ankle, Vina Del Mar, Chile

11/23/13 TTC fusions. Chilean Congress of Foot and Ankle, Vina Del Mar, Chile

11/23/13 Lateral ankle replacement. Chilean Congress of Foot and Ankle, Vina Del Mar, Chile

11/23/13 Midfoot fusions. Chilean Congress of Foot and Ankle, Vina Del Mar, Chile

12/03/13 Bone marrow aspiration techniques and biologic approaches to bone-grafting. Biomet Webcast Event, Baltimore, MD

3/13/14 The use of bone marrow concentrate in foot and ankle. TM Total Ankle Zimmer Booth, Exhibition Hall, AAOS Annual Meeting, New Orleans, LA

3/26/14 Design rationale and technique of implantation of the TM ankle replacement. Zimmer Bioskills, Anatomic Institute of University of Tubingen, Tugingen, Germany

3/29/14 Design rationale and technique of implantation of the TM ankle replacement. Zimmer Bioskills, Milan, Italy

4/01/14 Divine, dilemmas, dreamers, domains, delusions, designs and devices. Lecture to undergraduates of Johns Hopkins University Bioengineering and Design School, Baltimore, MD

4/11/14 Calcaneal fractures. Israeli Foot & Ankle Society (IFAS), Assuta Hospital, Tel Aviv, Israel

4/11/14 Achilles tendon updates. Israeli Foot & Ankle Society (IFAS), Assuta Hospital, Tel Aviv, Israel

4/12/14 Posterior tibial tendon updates. Israeli Foot & Ankle Society (IFAS), Assuta Hospital, Tel Aviv, Israel

4/12/14 Case presentations. Israeli Foot & Ankle Society (IFAS), Assuta Hospital, Tel Aviv, Israel

4/25/14 Relevation/ Revelation. Goucher Dance Department Celebration of Chrystelle Bond: 50 Years of History Passion and Excellence, Krausshaar Auditorium, Towson, MD

5/30/14 Zimmer trabecular metal total ankle. Zimmer Institute, Charlotte, NC

**OTHER PROFESSIONAL ACCOMPLISHMENTS**

1995, fall Union Memorial Hospital Foundation Fund Raiser “Magic Hands”

Produced and performed a fund raising illusion (magic) show involving hospital board and staff

Benefitted the Curtis National Hand Center

Triumph Ball, Towson MD

* 1. “The Stims”

Founding member of Orthopaedic staff band

Keyboards, backup vocals and occasionally soloist

Bi-annual performances

* 1. “The Sole Heelers”

Founding member of American Orthopaedic Foot and Ankle Society (AOFAS) band

Keyboards, backup vocals and occasionally soloist

Founded Companies:

1998 Designs for Wood. LLC. Prosthetic Design Company

1995 Greater Chesapeake Orthopaedic Associates, LLC. Orthopaedic practice

2000 Concepts in Medicine, LLC. Orthopaedic Product Company

2008 Bioactive Surgical, INC Innovative Biologic Systems

2012 The Stem Cell Suture Company LLC

Established Scholarships/ Research Funds

1995-Present The Schon Dance Science Scholarship, Annual scholarship to promote students involvement in dance science and perusing careers in health care related fields.

Goucher College, Towson, MD

2002-Present The Schon Scholarship, provides student financial aid for medical school tuition. Albany Medical College, New York, NY

2010-Present Schon Innovation Fund, 501c3 fund to support education and research in the field of musculoskeletal functions and disorders. Medstar Union Memorial, Baltimore, MD