**CURRICULUM VITAE**

**GAETANO J. SCUDERI, MD.**

Date of birth: May 17, 1962 Place of birth: Mt. Vernon, New York

Address: 658 W. Indiantown Road, Suite 212, Jupiter, Florida 33458

CYTONICS: Corporation: Founder, Chairman, Chief Medical Officer

CLINICAL FACULTY Clinical Instructor Stanford University 2009

Clinical Assistant Professor Stanford University January 2010-November 2012

**Licensure:** Florida, ME64034 obtained 1993

California, G73666 obtained 1992 reactivated 2008 NPI # 1912079807

**Certification**: Diplomat, National Board of Medical Examiners

American Board of Orthopaedic Surgeons, 1995.

ABOS Recertified June 2004, 2014, (active until 12/31/25)

CA. Fluoroscopy Supervisor and Operator Certification December 2008-

Disaster response Certified AAOS/OTA 2012

National Association of EMT Tactical Combat Casualty Care April 2018-22

UDS-MPDRS (Parkinson’s) Certification November 20, 2019

**HOSPITAL AFFILIATIONS:**

Jupiter Medical Center, Jupiter Outpatient Surgery Center Florida

SurgCenter of North Palm Beach. Florida

**MEMBERSHIPS/AFFILIATIONS:**

Fellow Academy of Orthopaedic Surgeons North American Spine Society Florida Orthopaedic Society

Institutional Review Board Member Parkway Hospital 2002- 2006

Chairman Dept Orthopaedic Surg 1999, Chairman OR Committee 2000-1 Parkway Regional Medical Center

**EDUCATION**

UNDERGRADUATE: State University of New York/ Stony Brook, N.Y.

Major: Biochemistry 1980 – 1983

MEDICAL: State University of New York at Buffalo, N.Y.

Degree: Doctor of Medicine 1983 – 1987

INTERNSHIP: University of Miami School of Medicine

Jackson Memorial Medical Center - Miami, FL

General Surgery 1987 – 1988

RESIDENCY: University of Miami School of Medicine

Jackson Memorial Medical Center - Miami, FL

Orthopedic Surgery 1988 - 1992

FELLOWSHIP: University of California at San Diego, California

Spine Surgery 1992 – 1993

Stanford University (Eugene Carragee, MD) 2/09-9/09

POST GRADUATE: Pediatric Spine, Harry Shufflebarger, M.D. Miami Children’s Hospital –

Miami, Florida. January 1991 - March 1991

PRIVATE PRACTICE: 1993-2004 Miami, 2004-2008 Jupiter, 2012- present, Jupiter

**Patents/Trials:**

*Patent No. Filed Issued Title*

7,709,215. 6/1/07 5/4/10 Methods and Kits for Diagnosing and Treating Acute Joint Injury

8,338,572 9/30/09 8/21/12 Kits For Biomarker Detection And Treatment Selection

8,841,079 11/20/12 9/23/14 Fibronectin aggrecan biomarker for the identification of spinal/joint pain

510K: BK 130060: Autologous Platelet Integrated Concentration ("APIC") System 1/17/14.

CE Mark ISO cert CE mark12/9/20, 2014 Autologous Platelet Integrated Concentration ("APIC") System

IDE trial approval 15944 2/14

IND trial approval PS001760 (APIC-CF) system, (IND # 16044, receipt date 6/12/2014)

CYT300-01 NCT02210468 Phase I/IIA for the treatment of osteoarthritis started 8/30/16 Interim analysis

CMS trial approval RCT for APIC for treatment of non healing wounds in diabetic foot ulcers

**HONORS & AWARDS:**

1983 Undergraduate: Sigma Beta SUNY at Stony Brook, New York

1986-87 Deans List SUNY Medical School, Buffalo, New York

1989 Sponsored to Dr. Enneking Pathology Course (Awarded to resident with honors for the academic year)

1992 Sponsored to Spine Update (Awarded to the resident with honors for the academic year)

1993 AOA - Zimmer Traveling Fellow Award

2008 Department of Anesthesia Annual Research Award, Stanford University

2009 SBIR Grant 1R43NS065669 - 01A1 Clinical validation study for the Cytonics diagnostic assay.

2010 Spine Technology Award Winner, Best new technology FAC diagnostic test.

2010 Spine Technology Award Winner, Best new diagnostic FAC diagnostic test.

2013 Medical Innovation Hero in Health Care Palm Beach Medical Society.

2015 Best Paper ISIS Improving Response to Treatment for Patients with DDD by use of Molecular Markers

2015 Spine Technology Award Winner, Best new biologic technology. APIC –PRP

2016 Napa Pain Conference Best Abstract. Using Molecular Markers to Treat DDD 2nd Place

Peer Review Publication Reviewer:The Spine Journal 2009-14, SPINE 2009-13, JOR 2010-12

Adynxx: Scientific Advisory Board March 2011-2015

Simpirica: Medical Monitor/Adjudicator May 2009-September 2011

Behavioral Medical Interventions/R3, Minneapolis, MN 2008 – Present file reviews on complex disability cases South Florida Utilization Review 1996- Present file reviews on complex disability cases

NEXUS: Texas 2017 -2/18 file reviews on complex disability cases

**PEER Reviewed ARTICLES:**

1. **Scuderi, G.J.**, Janecki, C.J.: Medial Malleolar Non-Union Treated Arthroscopically, American J. Arthroscopy, 1 :(5) 13-15, July 1991.

2. **Scuderi, G.J.,** Greenberg, SS, Latta, LL, Eismont, FJ: A Biomechanical Evaluation of MRI Compatible Wire in C-Spine Fixation. Spine 18:14.1991-4. 1993.

3. **Scuderi, G.J.,** Martinez, O.V., Greenberg, S.S., Banovac, K: The Penetration of Vancomycin into Nucleus Pulposus. Spine 18:14, 2039-42. October 1993.

4. **Scuderi, G.J.,** Lind, B., Garfin, S.: Complications in Anterior Corpectomy and Strut Fusion. Operative Tech. Orthop: Comp. Spinal Surg. 3:251-256, 1993. Vaccaro, A.R., Chestnut, R.,

5. **Scuderi, G.J.,** Healy, J.F., Massie, J.B., Garfin, S. Metallic Spinal Artifacts in MRI. Spine 19:1237-42, 1994.

6.Vaccaro, A.R., Ring, D., **Scuderi, G.J.,** Garfin, S.: Vertebral artery location in relation to the vertebral body as determined by Two-dimensional Computed Tomography evaluation. Spine 19:2637-2641,1994.

7.Ring, D., Vaccaro, A., **Scuderi, G.J.,** Pathria, M., Garfin, S: Acute calcific retropharyngeal tendonitis: Clinical presentation pathological characterization. JBJS 76A:1636-1642, 1994

8.Ring, D., Vaccaro, A., **Scuderi, G.J.,** Garfin, S.: Vertebral Osteomyelitis after Blunt Traumatic Esophageal Rupture. Spine 20:98-101,1995.

9.Hurley, M., Vaccaro, A., **Scuderi, G.J,** Garfin, S.: External Fixation in Patients with Pan vertebral Osteomyelitis & Paraplegia. Paraplegia 34:113-115, 1996.

10.Vaccaro, A.R., Ring, D., Lee, R., **Scuderi, G.J.,** Garfin, S.: Salvage Anterior C1-C2 Screw Fixation & Arthrodesis Through the Lateral Approach in a Patient with a Symptomatic Pseudoarthrosis. The Amer. J. of Orth. 26:349-353, 1997.

11.Ring, D., Vaccaro, A.R., **Scuderi, G.J.,** Klein G., Green D., Garfin, S.: An Association between the Flat back and Post Polio Syndrome: A report of three cases. Arch. Phys. Med. Rehab. 78:324-329, 1997.

12.Vaccaro, A.R., Ring, D., **Scuderi, G.J.,** Cohen, DS. Garfin, S.: Predictors of Outcome in Chronic LBP and Spondylolisthesis. Spine 22:2030-2035, 1997.

13.Weiss, L., Vaccaro, A. **Scuderi, G.J.,** Garfin, S. The Incidence of Pseudoarthrosis Following Postoperative Spine Infection. J. Sp. Disorders, 10:482-487, 1997.

14.Vaccaro, A.R., Falatyn, S.P., **Scuderi, G.J.,** Eismont, F.J., McGuire, R.A., Singh, K., Garfin S.: Early Failure of Long Segment Anterior Cervical Plate Fixation, J. Spine Dis. 11:410-415, 1998.

15. **Scuderi, G.J.,** Vaccaro A.R, Brusovanik GV, Kwon, B. Conjoined lumbar nerve root: An underappreciated Congenital Abnormality. J. Spinal Dis17 (2) 86-93. 2004

16. **Scuderi, G.J.,** Vaccaro A.R, Greenberg. S, Eismont, F.J., Lead Intoxication 2° to a Retained Bullet in the Intervertebral Disc. J. Spinal Dis17 (2) 108-111. 2004

17. Grauer JN, Vaccaro, A., Brusovanik, G. Giardi F., Silveri C., Cammisa, F. Kwon, B. Beiner, J. Albert, T. Hilibrand, A. **Scuderi, G. J.**, Evaluation of a novel pedicle probe in placement of thoracic and lumbosacral pedicle screws. J. Spinal Dis17(6):492-497,2004.

18. **Scuderi, G.J.,** Brusovanik G.V., Vaccaro A.R., Fitzhenry L.N., Is Wound Drainage Necessary after Lumbar Fusion Surgery? Medical Science Monitor. 2005 11(2): 64-66

19. **Scuderi, G.J.,** Vaccaro A.R, Fitzhenry L.N., Eichenbaum M.D., Brusovanik GV., C- 1 Rachischisis with

Occipitalization of the Atlas: A Case Report. Case Reports and Clinical Practice Review. 2005 Vol 6: 52-54.

20. **Scuderi, G.J.,** Sherman, A., Vaccaro A. Pahl, M., Brusovanik G., Symptomatic Cervical Disc Herniation Following a Motor Vehicle Collision: Return to Work. Work Comp v. Personal Injury Insurance Status. The Spine Journal. 2005. Vol 5:(6) 639-44.

21.**Scuderi, G.J.,** Brusovanik GV, Campbell D, Henry, R., Vaccaro A.R Evaluation of Non-Lead Based Protective Radiological Material in Spinal Surgery, The Spine Journal. 2006 Vol 6(5).577-82.

22. **Scuderi, G.J.,** Brusovanik GV, Anderson DG, Dunham C, Demeo RD, Vaccaro AR, Hallab, N: Cytokine Assay of Epidural Space Lavage in Patients with Lumbar Intervertebral Disk Herniation and Radiculopathy,J Spinal Dis & Tech. 2006 Vol19(4)266-9.

23. Salinsky, J.P., **Scuderi, G.J.,** Crawford, A.H., Occipito-Atlanto-Axial Dissociation in a Child with Preservation of Life: A Case Report and Review of Literature. Pediatric Neurosurgery. 2007; 43:137-141

24. **Scuderi G.J.**, Brusovanik G, Golish SR, Demeo R, Hyde J, Hallab N, Vaccaro AR. A critical evaluation of discography in patients with lumbar intervertebral disc disease. Spine J. 2008 (8). Pg 624-9.

24. Acosta-Rua AJ., **Scuderi G.J.**, Levine SM, Benz TM, Campbell DR. Treatment of Subacute LBP with a Novel Device for Continuous Passive Motion: Report of 3 cases. AJ Ther. 2008 Mar-Apr;15(2):176-9

25. Brusovanik GV, **Scuderi, G.J.,** Demeo RD., Vaccaro AR. Symptomatic Pseudarthrosis of a Traumatically Disrupted Congenital Lumbar Transverse Process- Ileum Fusion (Richards Disease) Treated Successfully With Steroid Injections: A Case Report PMR. 2009 Mar;1(3):281-3

26. **Scuderi, G.J.,** Cuellar, J., Gabrovsky, V Yeomans, D., Carragee, E., Angst, M: Epidural interferon gamma: a biomarker and potential therapeutic target for sciatica due to nerve root irritation SPINE 34. 21. 2311-7

27. Cuellar, J., **Scuderi, G.J.** Golish, R., Gabrovsky, V Yeomans, D., Diagnostic utility of cytokine biomarkers in the evaluation of knee pain. JBJS 2009. 91. 2313-20.

28. Cuellar V., Cuellar J., Golish R., Reuter M., Angst M., Carragee C., Yeomans D.,**Scuderi G.J.** Cytokine Evaluation in Individuals with LBP Utilizing Discographic Lavage. Spine Journal.10: 3,191-282 (March 2010)

29. Scoggin, JF, Brusovanik G., Pi, M., Byron I., Pang, P., **Scuderi, G.J.,** MIXED MARTIAL ARTS (MMA): Assessment of Injuries in Competition. American Journal of Orthopaedics 39: 5; 247-51. 2010.

30. **Scuderi, G.J.** Woolf N, Dent K, Golish, R, Cuellar, J, Cuellar V, Yeomans D, Carragee C, Angst, M, Bowser R, Hanna L. Identification of a Complex Between Fibronectin and Aggrecan G3 Domain in Synovial Fluid of Patients with Painful Meniscal Pathology. Journal of Clinical Biochemistry 43: 10; 808-14. 2010.

31.Cuellar, V, Cuellar, J, Golish,R, Yeomans, D., **Scuderi, G.J,** Cytokine profile in acute anterior cruciate ligament injury. Arthroscopy: Vol 26, No 10 (October), 2010: pp 1296-1301

32. **Scuderi, G.J.,** Cuellar, V, Cuellar, J., Vaccaro, A., Carragee, E., Accelerated degeneration and instability after cervical and lumbar nucleoplasty. J Spinal Disorders 2010 Dec; 23(8):521-4

33. **Scuderi, G.J.,** Golish, R.,Carragee, E., Late Postoperative Epidural Hematoma in a Patient Using

Clopidogrel. The Spine Journal 2010 Nov 20.

34. **Scuderi GJ,** Golish SR, Cook FF, Cuellar, J., Hanna, L. Identification of a Novel Fibronectin-Aggrecan Complex in the Synovial Fluid of Knees with Painful Meniscal Injury. J Bone Joint Surg Am. 2011;93:336-340

35. Golish, R., Cuellar, J., Campbell, D, Fernyhough, J., Carragee., C., Hanna, L., **Scuderi, G.J.,**  Are Persistently Symptomatic Vertebral Compression Fractures Associated with Abnormal Inflammatory Profiles? A Prospective Study. J. Spinal Disorders *Tech* 2011; April (24):121-125.

36. Golish, SR., Hanna, LS Bowser, RP, Montesano PX, Carragee EC, **Scuderi, G.J.,** Outcome of Lumbar Epidural Steroid Injection Is Predicted By Assay of a Complex of Fibronectin and Aggrecan from Epidural Lavage. SPINE 36(18): 1464-146

37. Carragee EC, Mitsunaga, K., Hurwitz E., Scuderi, G.J. Retrograde Ejaculation Following Lumbar Anterior

Interbody fusion Using rhBMP2: A cohort controlled study. The Spine Journal Spine J. 2011 Jun;11(6):511-6.

38. Gajendran VK, Reuter, M., Golish, SR., Hanna, LS, **Scuderi, GJ** The Fibronectin-Aggrecan Complex: Is It Present in Cervical Disc Disease?Phys Med Rehab . PMR. 2011 Nov;3 (11):1030-4

39. San Giovanni, T, Palanca, A., Golish, SR, Hanna, LS, **Scuderi, G.J**. correlation of intra-articular Ankle pathology with inflammatory markers and degradation products. Foot Ankle International. 2012 33:8 627-31.

40. Browning, SR, Weiser, AM, Woolf, N, Golish, SR, San Giovanni, T, **Scuderi, G.J.,** Hanna, LS, Platelet-Rich Plasma Increases Matrix Metalloproteinases in Cultures of Human Synovial Fibroblasts. JBJS, 2012 Dec 05; 94(23):e172 1-7.

41. Cuellar, JM, Golish, SR, Reuter, M, Hanna, LS, Carragee EC, **Scuderi, G.J** Does a Fibronectin and Aggrecan Complex Play a Role in Painful Lumbar Discs? PMR 2013 Apr;5(4):297-302.

42. Smith MW, Ith A, Carragee EJ, Cheng I, Alamin TF, Golish SR, Mitsunaga K, Scuderi GJ, Smuck M. Does the presence of the fibronectin-aggrecan complex predict outcomes from lumbar discectomy for disc herniation? Spine J. 2013 Nov 13. Epub.

43. Cuellar, JM, Borges, PM, Cuellar, VG, Yoo, A, **Scuderi, G.J**, Yeomans, DC. Cytokine expression in the epidural space:Model of non-compressive disc herniation-induced inflammation.SPINE 2013 Jan1;38(1):17-23.

44. Braun HJ, Busfield BT, Kim HJ, Scuderi GJ, Dragoo JL. The Effect of Local Anesthetics on Synoviocytes: An indirect contributor to chondrolysis. KSST, 2013 Jun;21(6):1468-74

45. Paraplegia + Charcot Spine= Functional Decline. Brar, N, Kennedy DJ, Cohn JA, Chaw E, **Scuderi, GJ.** Smuck, M. PMR,(IN PRESS)

46. Abrams GD, Safran MR, Shapiro LM, Maloney WM, Goodman SB, Huddleston JI, Bellino MJ, Scuderi GJ. Fibronectin-aggrecan complex as a marker for cartilage degradation in non-arthritic hips. 2014 Jan 30, Knee Surgery, Sports, Traumatology, Arthroscopy.

47. Wasterlain AM, Tran, AA., Chad, C, Campbell, DR,Braun, HJ, Scuderi, YA, **Scuderi, GJ**. Can We Improve Workflows in the OR?A Comparison of Quality Perceptions and Preoperative Efficiencyacross Institutions in Spine Surgery**.** Bulletin of the Hospital for Joint Diseases. 2015;73(1): 46-53

48. Shapiro,LM, Safran,MR, Maloney,WJ, Goodman,SB, Huddleston, JI, Bellino,MJ, **Scuderi, GJ**, Abrams, GD. Cytokines As A Predictor of Clinical Response Following Hip Arthroscopy: Minimum 2-Year Follow-Up. Journal of Hip Preservation Surgery. 2016 May 2;3(3):229-35.

49. Cuellar, JM, Cuellar, VG, **Scuderi, G.J,** α2-Macroglobulin: Autologous Protease Inhibition Technology Phys Med Rehabil Clin N Am. 2016 Nov;27(4):909-91

50. Dragoo, JL, George, E, Cuellar, VG, Cook, F, Golish, SR, **Scuderi, G.J.** Molecular biomarkers in patients with anterior cruciate ligament tear with and without other associated lesions. Submitted to Arthroscopy

51. Golish, SR., **Scuderi, G.J.,** Ith, MA, Carragee EC, Cheng, I, Hanna, LS, Smuck, M. Correlation of Cervical Disc Disease with Fibronectin-Aggrecan Complex (FAC), Inflammatory Cytokines, Matrix Metalloproteinases.

Submitted to SPINE.

52. **Scuderi, G.J.,** Cuellar, JM, Montesano, PX. Intradiscal injection of an autologous alpha-2-macroglobulin (A2M) concentrate alleviates back pain in FAC-positive patients. Ortho & Rheum Open Access J. 2017; 4(2): 555634. DOI: 10.19080/OROAJ.2017.04.555634

53. Zhang, Y, Wei X, Browning, SR, **Scuderi, G.J.,** Hanna, LS, Wei, L. Targeted designed variants of A2M attenuate cartilage degeneration in rat ACLT OA model. Arthritis Research & Therapy (2017) 19:175

54. [Alamin TF](https://www.ncbi.nlm.nih.gov/pubmed/?term=Alamin%252520TF%25255BAuthor%25255D&cauthor=true&cauthor_uid=28567591), [Munoz M](https://www.ncbi.nlm.nih.gov/pubmed/?term=Munoz%252520M%25255BAuthor%25255D&cauthor=true&cauthor_uid=28567591), [Zagel A](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zagel%252520A%25255BAuthor%25255D&cauthor=true&cauthor_uid=28567591), [Ith A](https://www.ncbi.nlm.nih.gov/pubmed/?term=Ith%252520A%25255BAuthor%25255D&cauthor=true&cauthor_uid=28567591), [Carragee E](https://www.ncbi.nlm.nih.gov/pubmed/?term=Carragee%252520E%25255BAuthor%25255D&cauthor=true&cauthor_uid=28567591), [Cheng I](https://www.ncbi.nlm.nih.gov/pubmed/?term=Cheng%252520I%25255BAuthor%25255D&cauthor=true&cauthor_uid=28567591), **Scuderi, G.J.** [Budvytiene I](https://www.ncbi.nlm.nih.gov/pubmed/?term=Budvytiene%252520I%25255BAuthor%25255D&cauthor=true&cauthor_uid=28567591), [Banei N](https://www.ncbi.nlm.nih.gov/pubmed/?term=Banei%252520N%25255BAuthor%25255D&cauthor=true&cauthor_uid=28567591)

Ribosomal PCR assay of excised intervertebral discs from patients undergoing single-level primary lumbar microdiscectomy Eur Spine J. 2017 Aug; 26(8):2038-2044. Epub 2017 May 31.

55. Cuellar, JM, Golish, SR, Song, Y, Cuellar, VG, Cook, F, **Scuderi, G.J,** Can intra-articular cytokine profiling predict the development of knee pain? Four-year follow-up of asymptomatic controls. Submitted to American J Sports Medicine, March

**BOOK CHAPTERS:**

Scuderi, G.J. The Non-Operative Treatment of Spinal Column Trauma, Handbook of Head and Spinal Trauma. (Ed. Greenberg, J.).Marcell Dekker 1993

Scuderi, G.J., Janecki, C: Fracture and Fracture Defects Foot/Ankle Arthroscopy Pathology and Surgical Techniques. (Ed. Guhl, J.P. Slack, New Jersey, 1993)

Scuderi, G.J., Lind, B., Garfin, S.: Complications in Anterior Corpectomy and Strut Fusion. (Operative Techn. Orthop: Comp. Spinal Surg. 3: 251-256, 1993)

Scuderi, G.J., Garfin,S.: Anterior Approaches-Cervical Spine: Master Techniques in Orthopedic Surgery. (Ed. Thompson, R.C., Jr., and Bradford, D. 1995)

Scuderi, G.J., Atlanto-axial Rotatory Deformities: Pediatric and Adult Spine Trauma (Eds. Kim, DH., Ludwig, SC., Vaccaro, AR) 2008.

Laughlin, JD, Scuderi, G.J., Axial Back Pain: Diagnosis: Recent Advances in Spinal Surgery. (Eds. Vaccaro, AR, Koerner JD, Kim, DH). 2016

Cuellar, V, Cuellar,J., Scuderi, G.J. Alpha-2-Macroglobulin (A2M): Autologous Protease Inhibition Technology. Physical Medicine & Rehabilitation Clinics of North America. (Eds. Martinez SF. Regenerative Medicine). November 2016

Scuderi, G.J. Hanna, LS., Alpha-2- Macroglobulin: Protease Inhibitor Treatment: Advanced Procedures for Pain Management. (Eds. Sudhir, D and Deer, TR) 2017

Scuderi, GJ., Scuderi, GS. Platelet Poor Plasma. Stem Cells and Regenerative Medicine. Best Publishing. (Eds. Marx, R and Miller, R) 2020

**EDITORSHIPS:**

Vaccaro, A.R., Scuderi, G.J., Garfin, S.: Current Opinion in Orthopedics. Current Science, Eds Spine. Philadelphia 1994.

Carragee EJ, Bono CM, Scuderi GJ" Pseudomorbidity in iliac crest bone graft harvesting: the rise of rhBMP-2 in short-segment posterior lumbar fusion. "*Spine J* 2009;(9): 873-9.

Cuellar, V, Cuellar,J., Scuderi, G.J. Identification of meniscus damage biomarker: Implications for future treatment of knee injury. Therapy (2011) 8(3), 289–291

Authors and editors combined response to Zdeblick letter Carragee EJ, Hurwitz EL, Weiner BK, Scuderi GJ, Bono CM. Spine J. 2011 Jul;11(7):687-90

MCP-1 in Cartilage Damage: Human Confirmation. Yeomans DC, Scuderi GJ, Proc Natl Acad Sci 109(50):

**PUBLISHED INTERVIEWS:**

RADIOLOGY TODAY MRI compatible wire in Cervical Fixation. April 1993

ORTHOPAEDICS TODAY MRI compatible wire Techniques in Cervical Spine Fixation May 1993

ORTHOPAEDICS TODAY January 2010; 30:6 Cytokine biomarkers in orthopedics offer enormous diagnosis and prognosis potentials

ORTHOPAEDICS This Week: July 13, 2010 Confessions of a Reviewer

Pain Medicine News: January 2011 Biomarkers Predict Response to Injections In Radiculopathy Patients.

Stanford Medicine. February 2011. Diagnosing painful knee injury could become easier, less costly using biomarker.

Stanford Medicine. August 2011. Biomarker may signal whether common back pain treatment will work

Stars and Stripes. August 11, 2012. Blood test may yield warning of higher ACL injury risk

Orthopaedics This Week. February 17, 2013. Incredible Journey from Crash Victim to Visionary.

Orthopaedics This Week. July 30, 2014. Finding the Replacement for HA Injections in the Knee

Orthopaedics This Week. February 3, 2015. The Problem with Spine Surgeons.

Beckers: December 27, 2018. Biggest challenges for orthopedists and their patients. <https://www.beckersspine.com/orthopedic/item/44089-dr-gaetano-scuderi-the-biggest-challenges-for-orthopedists-and-their-patients.html>

<http://www.msnbc.com/morning-joe/antibody-testing-one-key-supporting-essential-healthcare-workers> Antibody testing one key to supporting essential healthcare workers. April 2, 2020

**ABSTRACTS:**

Garfin, S., Vaccaro, A.R., Scuderi, G.J.: Commentary. Current Opinion in Orthopedics 5:1-2, 1994.

Vaccaro, A., Ring, D., Scuderi, G.J., Garfin, S.: Acute Calcific Retropharyngeal Tendonitis: Clinical presentation and Pathologic Characterization. Orthop. Trans. 18:712, 915, 1994.

Vaccaro, A.R., Garfin, S., Scuderi, G.J., Chestnut, R.: Metallic Artifacts in MR imaging. Orthop. Trans. 18:817-818, 1994.

Scuderi, G.J., Vaccaro, A.R., Garfin, S.: The effect of Postoperative Spinal Wound Infection in Spinal Arthrodesis. Orthop. Trans. 18:1098, 1994.

Scuderi, G.J., Vaccaro, A.R., Maguire, M., Cohen, D.S., Garfin, S.: Is fusion necessary in the surgical management of adult low-grade Spondylolisthesis? Orthop. Trans. 18:1103, 1994.

Ring, D., Vaccaro, A.R., Scuderi, G.J., Garfin, S.:Vertebral Osteomyelitis after Blunt Traumatic Esophageal Rupture. Yearbook of Nuclear Medicine, 1996.

Scuderi, G.J., Sherman, A., Vaccaro A. Pahl, M., Brusovanik G., Symptomatic Cervical Disc Herniation Following a Motor Vehicle Collision: Return to Work. Comparative Study of Work Comp vs. Personal Injury Insurance Status. The Spine Journal. 5:4S p.33.

Scuderi, G.J., Brusovanik GV, Campbell D., Henry RJ., Kwon, B Vaccaro A.R Evaluation of Non-Lead Based Protective Radiological Material in Spinal Surgery, The Spine Journal.5:4S p.125.

Scuderi, G.J., Cuellar, J., Gabrovsky, V Yeomans, D., Angst, M., A Cytokine Biomarker and potential therapeutic target for Disk Herniation induced sciatica. The Spine Journal.7:5S p. 79S

Scuderi, G.J., Cuellar, J., Gabrovsky, V Yeomans, D., Angst, M: Resolution of radiculopathy in patients identified with a cytokine biomarker corresponds to inflammatory blockade in an animal model of disc herniation. Proceedings of CSRS Nov 29- Dec 1, 2007.

Borges, P. Cuellar J, Gabrovsky V, Scuderi G., Yeomans, D. An animal model for the investigation of nucleus pulposus-induced inflammatory cytokine modulation. Proceedings of CSRS Nov 29- Dec 1, 2007.

Golish, R., Cuellar, J., Campbell, D, Fernyhough, J., Carragee., C., Hanna, L., Scuderi, G.J., Are Persistently Symptomatic Vertebral Compression Fractures Associated with Abnormal Inflammatory Profiles? A Prospective Study. Proceedings of NASS Nov 11-15, 2009.

Golish, SR., Hanna, LS Bowser, RP, Montesano PX, Carragee EC, Scuderi, G.J., Outcome of Lumbar Epidural Steroid Injection Is Predicted By Assay of a Complex of Fibronectin and Aggrecan from Epidural Lavage. Proceedings of NASS Oct 6-9, 2010.

**SCIENTIFIC EXHIBITS/POSTERS:**

Penetration of Vancomycin into Nucleus Pulposus. Scuderi, G.J., Martinez, O., Greenberg, S., Banovac, K: Amer Ortho Assoc. San Diego, Ca. June 4-9, 1993.

Spinal External Fixation for Recalcitrant Osteomyelitis and Paraspinal Abscess. Hurley, M., Scuderi, G.J., Vaccaro, A.R., Garfin, S. The 39th Annual Conference of the American Paraplegia Society. Las Vegas, Nevada - Sep. 7-9, 1993.

Management of Superior Cervical Spine Pathology with the Posterolateral Transcervical Approach. Pelliterri, P., Scuderi, G.J., Garfin, S., Davidson, T. AA of Otolaryngologists. Minneapolis, MN Oct. 2-6, 1993.

Transaxial CT Evaluation of the Location of the Vertebral Artery in the Cervical Spine. Vaccaro, A.R., Ring, Scuderi, G.J., Garfin, S. CSRS, NY, Dec. 1-4, 1993.

Hydroxyapatite Deposition in the Cervical Spine. (Vaccaro, A.R, Ring, Scuderi, G.J., Garfin, S). Cervical Spine Research Society, NY, N.Y., Dec. 1-4, 1993

The Early Failure of Long Anterior Cervical Plate Fixation (Vaccaro, A. Falatyn, Garfin, Eismont, McGuire, Scuderi, G.J., Abraham). North American Spine Society, Vancouver, B.C., Canada, Oct. 23-27, 1996.

Failure of Multi-Level Anterior Unicortical Cervical Plate Instrumentation Vaccaro, Abraham, Falatyn, Scuderi G., Garfin, Eismont, McGuire. AAOS, San Francisco, CA, Feb. 12-17, 1997.

Scuderi, G.J., Sherman, A., Vaccaro A. Pahl, M., Brusovanik G., Symptomatic Cervical Disc Herniation Following a Motor Vehicle Collision: Return to Work. Comparative Study of Work Comp vs. Personal Injury Insurance Status. World Spine III. Rio de Janeiro, Brazil July 31-Aug 3, 2005

Scuderi, G.J., Brusovanik GV, Campbell D., Henry RJ. Kwon, B Vaccaro A.R Evaluation of Non-Lead Based Protective Radiological Material in Spinal Surgery, NASS 20th Annual Meeting, Philadelphia, PA. September 27-30, 2005.

Scuderi, G.J., Sherman, A., Vaccaro A. Pahl, M., Brusovanik G., Symptomatic Cervical Disc Herniation Following a MVC: Return to Work. Comparative Study of WC vs. PI NASS 20th Annual Meeting, Philadelphia, PA. September 27-30, 2005.

Scuderi, G.J., Brusovanik GV, Campbell D., Henry RJ. Kwon, B Vaccaro A.R Evaluation of Non-Lead Based Protective Radiological Material in Spinal Surgery,. American Academy of Orthopedic Surgeons, Chicago IL, March 24-8, 2006

Borges, P. Cuellar J, Gabrovsky V, Scuderi G., Yeomans, D. An animal model for the investigation of nucleus

pulposus-induced inflammatory cytokine modulation. Society for Neuroscience. San Diego, CA Nov 3-7, 2007 and CSRS Nov 29- Dec 1, 2007.

Scuderi, G.J., Cuellar, J., Gabrovsky, V Yeomans, D., Angst, M., Resolution of Radiculopathy in patients identified with Cytokine Biomarker corresponds to inflammatory blockade in an animal model. ORS, San Francisco Ca. March 2-4, 2008.

Scuderi, G.J., Cuellar, J., Gabrovsky, V., Golish SR, Yeomans, D, Diagnostic utility of cytokine biomarkers in the evaluation of meniscal pathology following acute knee injury, a comparison study with normal volunteers ORS San Francisco, Ca. March 2-4, 2008.

Scuderi, G.J., Cuellar, J., Gabrovsky, V Yeomans, D., Angst, M., A Cytokine Biomarker and potential therapeutic target for Disk Herniation induced sciatica. SAS, Miami, FL May 6-10, 2008.

Cuellar, J., Scuderi, G.J., Gabrovsky, V., Vaccaro, A, Carragee, E., Accelerated degeneration and Instability after Cervical and Lumbar Nucleoplasty; A Pilot study of negative long term consequences. NASS 23th Annual Meeting, Toronto, ON. October 14-18, 2008.

Presence of a novel complex of Fibronectin and Aggrecan in intervertebral discs by discography. Scuderi,G.J., Golish, SR., Cuellar, J., Reuter, M., Carragee., C., Hanna, LS., AAOS New Orleans, LA March 9-13, 2010

Presence of a novel complex of Fibronectin and Aggrecan in intervertebral discs by discography. Scuderi, G.J., Golish, SR., Cuellar, J., Reuter, M., Carragee., C., Hanna, LS., WFSR, Montreal CA. July 5-8, 2010 .

Functional Outcome after Lumbar ESI Is Predicted By A Complex of Fibronectin and Aggrecan; Golish, S, Hanna, L, Bowser, R. Montesano, P, Carragee, E, Scuderi, GJ. CNS San Francisco, CA. Oct 16-21, 2010.

Local Anesthetics Activate Fibroblast-like Synoviocytes and Induce Matrix Metalloproteinase Production.

Braun H, Busfield BT, Hyeon JK, Scuderi GJ, Dragoo JL. ORS. February 4-7 2012 San Francisco, CA.

Hip Synovial Fluid Cytokine Profiling In Osteoarthritis Versus Labral Pathology Patient Populations. Abrams GD, Golish SR, Stone JA, Hanna LS, Olan W, Phillipon MJ, Scuderi GJ. ORS. February 4-7 2012 San Francisco, CA.

Correlation of cervical disc disease with Fibronectin-Aggrecan Complex (FAC), inflammatory cytokines, and matrix metalloproteinases. Golish, SR, Scuderi, G.J., Ith, A., Cheng, I, Carragee, EJ, Smuck, M. AAOS February 7-11. 2012 San Francisco, CA

Cuellar, JM, Golish, SR, Song, Y, Cuellar, VG, Cook, F, **Scuderi, G.J,** Can intra-articular cytokine profiling predict the development of knee pain? Four-year follow-up of asymptomatic controls. ORS San Francisco, CA. February 4-7, 2012 and ASSM Orlando, FL. May 14-19, 2012.

Is there a Chondroprotective Effect of Autologous Protease Inhibitor Concentrate (APIC) in an Osteoarthritis (OA) Rabbit Model? A Pilot Study. Cuellar, V; Cuellar, J; Browning, S; Scuderi, GJ. Golish, SR. Hanna, L.

Annual Meeting of PMR, Atlanta, GA. November 15-18, 2012 *And* 11th Annual Pain Medicine Meeting, November 15-18, 2012 Miami, Florida. *And* ORS Annual Meeting. San Antonio, Texas, January 26-9. 2013

Paraplegia + Charcot Spine= Functional Decline. Brar, N, Kennedy DJ, Cohn JA, Chaw E, **Scuderi, GJ.** Smuck, M. Annual Meeting of PMR, Atlanta, GA. November 15-18, 2012.

Can Cartilage Degradation be Prevented by Platelet Rich Plasma (PRP) Preparations on Bovine Cartilage Explants? Browning, S; **Scuderi, GJ.** Golish,SR, Woolf, N; Carballo, C; Hanna, L. Annual Meeting of PMR, Atlanta, GA. Nov 15-18, 2012. *And* 11th Annual Pain Medicine Meeting, Miami, Florida. Nov 15-18, 2012

Chondroprotective Effect of Alpha-2-Macroglobulin (A2M) on Bovine Cartilage Explants. Browning, S; **Scuderi, GJ.** Golish,SR, Woolf, N; Carballo, C; Hanna, L. Annual Meeting of PMR, Atlanta, GA. November 15-18, 2012

Does the Presence of the Fibronectin-Aggrecan Complex Predict Outcomes from Lumbar Discectomy for Disc Herniation? Smith, M, Ith A, Golish, SR, Mitsunaga, K., Carragee EJ, Alamin, T, Cheng, I, Hanna LS, Scuderi GJ. AAOS Chicago IL. March 19-23, 2013

Is There A Chondroprotective Effect Of Autologous Protease Inhibitor Concentrate (Apic) In An Osteoarthritis (Oa) Rabbit Model? A Pilot Study. **Scuderi, GJ**. Gabrovsky-Cuellar, V, Cuellar, J, Golish, SR, Browning, S; Hanna, L. ISAKOS. Toronto, CA. May 12-6, 2013.

Cartilage Catabolism Induced By Metalloproteinases Or Inflammatory Cytokines Are Inhibited By Alpha-2-Macroglobulin (A2m) And Platelet-Rich Plasma -APIC **Scuderi, GJ**. Weisser, A, Carballo, C, Golish, SR, Browning, S; Hanna, L. ISAKOS. Toronto, CA May 12-6, 2013, And AOFAS. Hollywood, FL, July 17-20, 2013

Impact of fluoroscopist awareness on radiation exposure in localizing films for lumbar spine surgery. Wasterlain, AS, Tang CZ, Campbell DR, Scuderi GJ: AAOS Chicago IL. March 19-23, 2013. And NASS, New Orleans, Louisiana, October 9-12, 2013.

Alpha-2-macroglobulin Inhibits Elastase, MMP-2, and MMP-8. Scuderi GJ, Laughlin J, Hanna LS, Browning S, AAOS. Las Vegas, NV. March 24-28, 2015.

Improving Response to Treatment for Patients with DDD by the use of Molecular Markers. Scuderi GJ, Cuellar, JC, Montesano, PX. AAPM Palm Springs, CA February 18-20, 2016: AAOS/ORS Orlando, FL. March 2-8, 2016.

Improving Response to Treatment for Patients with DDD by the use of Molecular Markers. Scuderi GJ, Cuellar, JC, Montesano, PX. Osteopathic Medical Conf. Orlando, FL. October 17-21, 2016.

Zhang, Y, Wei X, Browning, SR, Scuderi, G.J., Hanna, LS, Wei, L. Targeted designed variants of A2M attenuate cartilage degeneration in rat ACLT OA model. ORS San Diego, California, March 19-22. 2017

**PRESENTATIONS:**

Scuderi, G.J., Gillespie, R.: Windblown Hip Syndrome in Cerebral Palsy. Orthopedic Rounds. State University of New York at Buffalo - January 1987.

Scuderi, G.J., Cervical Spine Injuries in Athletes. Orthopedic **Grand Rounds**. University of Miami School of Medicine, Miami, FL - October 1990.

Scuderi, G.J., Ouellette, E.A.: Natural History of Tears of the Triangular Fibrocartilage Complex in the Baboon. Orthopedic **Grand Rounds**. University of Miami, School of Medicine, Miami, FL - September 1991.

Scuderi, G.J**.,** Eismont, F.J.: A Biomechanical Evaluation of Cervical Spines with MR Compatible Wire. Orthopaedic **Grand Rounds**. University of Miami, School of Medicine. Miami, FL - April 1992.

Scuderi, G.J., Pathophysiology of Spinal Stenosis. Orthopedic **Grand Rounds**. University of California - San Diego, CA - Sep. 16, 1992.

Scuderi, G.J., Cervical Degenerative Disc Disease: Natural History and Non Operative Treatment. San Diego Spine Symposium - November 19-21, 1992.

Scuderi, G.J., Greenberg, S., Latta, L., Cohen, D. Eismont, F.: A Biomechanical Evaluation of MRI Compatible Wire for Cervical Spine Fixation. 20th Annual Meeting of CSRS, Palm Desert, Ca, Dec. 3-5, 1992.

Scuderi, G.J., Star, J., Greenberg, S., Eismont, F.J.: A Retrospective Evaluation Occipital-Cervical Fusions in Non-Rheumatoid Patients. 20th Annual Meeting of the CSRS, Palm Desert, Ca. December 3-5, 1992.

Scuderi, G.J.: The Degenerative Cervical Spine. Invited Lecturer. EBI Systems, Parsippany, New Jersey - January 1993.

Scuderi, G.J., Greenberg, S., Latta, L., Eismont, F.: A Biomechanical Evaluation of MRI Compatible Wire for Use in Cervical Spine Fixation. AAOS, 60th Meeting, San Francisco, CA - Feb. 18-23, 1993.

Scuderi,G.J., Thoracolumbar Spine Trauma. Orthopaedic **Grand Rounds**. Southwestern University, Dallas, TX. Feb. 27, 1993.

Scuderi, G.J.: Surgical Treatment of Cervical Spondylosis. Orthopedic **Grand Rounds**. UCSD Medical Center, San Diego, California -March 17, 1993.

Scuderi, G.J., Star, J., Greenberg. S., Eismont, F.J.: A Retrospective Evaluation of Occipital-Cervical Fusions in Non-Rheumatoid Patients. 8th Annual Meeting of the NASS, San Diego, California - October 14-16, 1993.

Scuderi, G.J., Greenberg, S., Eismont, F.J.: Lead Intoxication Secondary to a Retained bullet in the intervertebral disc. 8th Annual Meeting of the NASS, San Diego, California - October 14-16, 1993.

Vaccaro, A.R., Scuderi, G.J., Chestnut, R., Garfin, S.: Metallic Spinal Artifacts in MRI Imaging. 8th Meeting of North American Spine Society. October 14-16,1993.

Scuderi, G.J., Star, J., Greenberg, S, Banovac K, Eismont, F. Evaluation of Occipital-Cervical Fusions in Non-Rheumatoid Patients. Presented at the Florida Orthopedic Society, Palm Beach, FL - November 5-7, 1993.

Vaccaro, A.R., Ring, Scuderi, G.J., Garfin, S.: Vertebral Artery Location in Relation to the Vertebral Body Determined by Two Dimensional CT Evaluation: AAOS, Orlando, FL - February 18, 1994

Scuderi, G.J., Greenberg, S., Latta, L., Eismont, F.: Biomechanical Evaluation of MRI Compatible Wire for use in Cervical Spine Fixation. Specialty Day, FOSA, AAOS 61st Annual Meeting, New Orleans, Louisiana - February 27, 1994.

Scuderi, G.J., Vaccaro, A.R., Garfin, S.: Is Fusion Necessary in the Surgical Management of Adult Low Grade Spondylolisthesis. AAOS 61st Annual Meeting, New Orleans, Louisiana, February 24 - March 1, 1994.

Scuderi, G.J., Vaccaro, A.R., Garfin, S.: Incidence of Pseudoarthrosis Following Infection Complicating Spinal Arthrodesis. AAOS 61st Annual Meeting, New Orleans, Louisiana - February 24 - March 1, 1994.

Vaccaro, A.R., Garfin, S., Scuderi, G.J., Chestnut, R.: MRI Artifacts in Spinal Imaging: Association of Bone and Joint Surgeons, Carlsbad, Ca. May 1994.

Scuderi, G.J., Vaccaro, A.R., Garfin, S.: International Society for the Study of the Lumbar Spine, Seattle, Washington - June 23-24, 1994.

Vaccaro, A.R., Scuderi, G.J., Ring, Garfin, S.: Two-dimensional CT Localization of the Vertebral Artery: European CSRS, Rome, Italy - June 28 - July 2, 1994.

Scuderi, G.J., Vaccaro, A.R., Ring, Garfin, S.: Hydroxyapatite Deposition in the Cervical Spine: European Spine Society, Rome, Italy. June 18- July 2, 1994.

Scuderi, G.J.: Orthopaedic Grand Rounds, University of Miami, School of Medicine, Complication in Cervical Spine Surgery - June 1995.

Scuderi, G.J.: Orthopaedic **Grand Rounds**, University of Miami, School of Medicine, Flatback Deformity - November 1995.

Scuderi, G.J.: Microendoscopic Discectomy:Minimally Invasive Update, Disney Magic - November 5-8, 1999.

Scuderi, G.J.: Presenter – Panel Discussion: Worker’s Compensation – A Diversified Perspective, Renaissance Miami Biscayne Bay Hotel March 14, 2002

Scuderi, G.J.: Instructor for The 13th Spine Study Group, Cleveland Clinic Center for Continuing Education in Palm Beach, Florida April 18 – 21, 2002

Scuderi, G.J.: Presenter for Spine Course for Operating Room Personnel, AO Principles Related to Spine Surgery, Panama City Beach, Fl. September 7, 2002.

Scuderi, G.J.: Clearance of the Cervical Spine. Parkway Hospital ER Symposium. April 30, 2003.

Scuderi, G.J.: Understanding Back Pain, Nanotechnology. Update, Low Back: Jupiter Resort, April 3, 2004.

Scuderi, G.J.: Understanding Back Pain, Nanotechnology. LBP. Diagnosis and Treatment: Jupiter Resort, April 2, 2005.

Scuderi, G.J., Brusovanik GV, Anderson, D.G, Dunham, C., Vaccaro A.R, Hallab, N.: Cytokine Assay of the Epidural Space Lavage in Patients with Lumbar Intervertebral Disk Herniation and Radiculopathy. Florida Ortho Soc. Sarasota, Fl. May 20-22, 2005.

Scuderi, G.J., Brusovanik G, Anderson, D.G, Demeo, R., Hyde, J., Vaccaro A.R, Hallab, N.: Cytokine Assay of Disc Space Lavage in Patients with Lumbar Intervertebral Disk Disease. FOS. Sarasota, Fl. May 20-22, 2005.

Scuderi, G.J., Sherman, A., Brusovanik GV, Pahl, M., Vaccaro A.R, Symptomatic Cervical Disc Herniation Following a Motor Vehicle Collision: Return to Work: Comparative Study of Workers Compensation vs. Personal Injury Status. Florida Orthopaedic Society. Sarasota, Fl. May 20-22, 2005.

Scuderi, G.J., Brusovanik GV, Campbell D., Henry RJ. Kwon, B Vaccaro A.R Evaluation of Non-Lead Based Protective Radiological Material in Spinal Surgery, . World Spine III. Rio de Janeiro, Brazil July 31-Aug 3, 2005

Scuderi, G.J., Brusovanik GV, Anderson, DG, Dunham, C., Vaccaro A.R, Hallab, N: Cytokine Assay of Epidural Space Lavage in Patients with Lumbar Herniated Disk and Radiculopathy, World Spine III. Rio de Janeiro, Brazil 7/31-8/3, 2005

Scuderi, G.J., Brusovanik GV, Campbell D., Henry RJ. Kwon, B Vaccaro A.R Evaluation of Non-Lead Based Protective Radiological Material. SIPP. NASS 20th Annual Meeting, Philadelphia, PA. September 27-30, 2005.

Scuderi, G.J., Lumbar Controversies, procedures to find the cause and treat. 61st Ann Florida WC Educational Conf Aug 14, 2006.

Scuderi, G.J., Cuellar, J., Gabrovsky, V Yeomans, D., Angst, M. Cytokine Biomarker and potential therapeutic target for Disk Herniation induced sciatica. NASS 22nd Annual Meeting, Austin TX. October 23-27, 2007

Scuderi, G.J.,Cuellar, J., Gabrovsky, V Yeomans, D., Angst, M., Resolution of Radiculopathy in patients identified with Cytokine Biomarker corresponds to inflammatory blockade in an animal model. CSRS 35th Annual Meeting, San Francisco Ca. Nov 29- Dec 1, 2007. And ORS San Francisco, Ca March 2-5, 2008.

Spine Surgery for Osteoporotic and Elderly Patients. Instructional Course Lecture # 422 San Francisco Ca. AAOS March 9, 2008.

Controversies in Diagnosing Back Pain. San Diego, Ca. March 28-9, 2008

Scuderi, G.J., Cuellar, J., Gabrovsky, V., Carragee, E., Yeomans, D., Angst, M., Epidural interferon gamma correspondence to with lumbar radiculopathy NASS 23th Annual Meeting, Toronto, ON. October 14-18, 2008.

Cell signaling in the musculoskeletal system. Globus Complex Case Review. San Diego, Ca. March 27-8, 2009

Orthopaedic Grand Rounds, Stanford University, Biomarkers in Orthopaedics. September 2009.

Biomarkers Advances in Orthopaedics Young Lions Meeting (Stryker) Ft. Lauderdale, FL. November 6, 2009.

Case Study: Upper Extremity Pain/Injury. Physician’s Assistant student lecture Stanford University April 8, 2010

Orthopaedic Grand Rounds, Stanford University, Biomarkers in the era of healthcare cost containment  
from “Scope to Spine”. September 2010.

Functional Outcome after Lumbar Epidural Steroid Injection Is Predicted By A Complex of Fibronectin and Aggrecan. Golish, SR, Hanna, LS, Bowser, RP. Montesano, PX, Carragee, EJ, Scuderi, G.J.,

1. 8th Annual AOSpine North America Fellows Forum 2010, Banff, Canada. May 2010

2. World Forum for Spine Research, Montreal CA. July 2010.

3. North American Spine Society October 2010

4. 7th Interdisciplinary World Congress on Low back and Pelvic Pain. Los Angeles, CA. November 2010.

Physical Medicine CORE Rounds, Stanford University, Motion Preservation Technology December 1, 2010.

Ankle intraarticular pathology correlation with inflammatory markers and degradation products. San Giovanni, T, Golish, SR, Hanna, LS, Scuderi, G.J. AAOS. San Diego CA. February 17 and 20 (Specialty Day), 2011.

Can we reliably obtain inflammatory marker signatures from open discectomy samples? Scuderi, G.J., Golish, SR, Ith, A., Cheng, I., Smith, M., Alamin, T., Carragee, EJ, World Spine. Barcelona, Spain. March 24, 2011.

Identification of fibronectin aggrecan complex (FAC) associated with inflammatory cytokines in cervical radiculopathy resulting from herniated disc. Reuter, M., Golish, SR., Hanna, LS, Scuderi, G.J., World Spine. Barcelona, Spain. March 24, 2011.

Diagnostic and Therapeutic Developments for spinal related pain. 6th Annual Spine Technology Summit.

Meritage. Napa Valley, May 12, 2011

Upper Extremity Pain/Injury. Physicians Assistant student lecture Stanford University August 18, 2011.

Carragee, E.J., Mitsunaga, K., Abrams, J., Scuderi, G.J., Local Bone Graft Harvesting with Facet Arthrodesis in Postero lateral Fusion: Outcomes and Morbidity Compared with AMPLIFY Trial Data. NASS Chicago, IL. November 3, 2011.

Rehabilitation at the Molecular Level? The role of cytokines and biomarkers. Symposium. Annual Meeting of Physical Medicine and Rehabilitation. Orlando, FL. November 17, 2011.

Correlation of cervical disc disease with FAC, inflammatory cytokines, and matrix metalloproteinases. Golish, SR, Scuderi, G.J., Ith, A., Cheng, I., Carragee, EJ, Smuck, M. CSRS Scottsdale, AZ. December 8, 2011.

Wasterlain AM, Golish, SR., Reed, M, Braun, HJ, Scuderi, G.J. Drivers of Quality and Outcomes in Spine Surgery: Perceptions Among Medical Device Representatives. AAOS San Francisco CA February 8, 2012.

Cytokine profiling in an animal model of non-compressive intervertebral disc herniation using epidural INFg. Cuellar V, Cuellar J, Borges, P, Scuderi, GJ, Yeomans DC. ISASS, Barcelona, Spain. March 22, 2012.

Inflammatory Cytokines in the Painful Ankle Joint: Arthritis and Osteochondral Lesions. Hunt, KJ, Palanca, A, Valladares, R; Scuderi, GJ, Chou, LB. Annual Meeting of AOFAS, June 21, 2012, San Diego, CA.

Do Inflammatory Markers at Open Discectomy Predict Successful Surgical Outcomes. Smith, M, Ith A, Golish, SR, Mitsunaga, K., Carragee EJ, Alamin, T, Cheng, I, Hanna LS, Scuderi GJ. NASS. October 26, 2012. Dallas, Texas. And IMAST, Istanbul, Turkey, July 19, 2012.

Cervical Spine: Physicians Assistant student lecture Stanford University August 20, 2012.

Brachial Plexus and nerve injury: Physicians Assistant student lecture Stanford University August 20, 2012.

Lumbar spine: Physicians Assistant student lecture Stanford University August 20, 2012.

Can Sacroiliac Joint Aspiration assist in diagnosis? A pilot study. Smuck M, Golish SR, Ith A, Carragee EJ, Hanna LS, Scuderi GJ. NASS. October 26. Dallas, Texas. AAPMR, Atlanta, GA. November 15-18, 2012

Cartilage Catabolism Induced by Metalloproteinases or Inflammatory Cytokines are Inhibited by Alpha-2-Macroglobulin (A2M) and Platelet-rich Plasma - Autologous Protease Inhibitor Concentrate (PRP-APIC). Browning, S; Scuderi, GJ. Weiser, A; Carballo, C; Golish, SR; Hanna, L. ORS 2013 Annual Meeting in San Antonio, Texas, January 28.

Osteoarthritis: Current Understanding and Treatments. CME lecture Jupiter Medical Center January 16, 2013

Osteoarthritis: Current Understanding and Treatments. CME lecture UHZ Sports, Miami. February 12, 2013.

TLIF Stance PRO. Point Counterpoint. Nuvasive Sponsored Course. Key West. FL. April 12-13, 2013

Osteoarthritis: Current Understanding and Treatments. Grand Rounds, Univ of Miami. May 9, 2013.

Fibronectin-Aggrecan Complex as a Marker for Cartilage Degradation in Non-Arthritic Hips. Abrams, GD, Safran MR, Maloney WJ, Goodman SB,, Huddleston JI, Bellino MJ, **Scuderi GJ** AAOS Chicago IL. March 20-24, 2013: ISAKOS. Toronto, CA. May 12-6, 2013.

Cartilage Catabolism Induced by Metalloproteinases or Inflammatory Cytokines are Inhibited by Alpha-2-Macroglobulin (A2M) and Platelet-rich Plasma. Browning, S; **Scuderi, GJ.** Weiser, A; Carballo, C; Golish, SR; Hanna. Florida Orthopedic Society Ocean Reef, FL June 1, 2013.

The Problem with Epidurals. Workers Compensation Annual WCI meeting. Orlando, FL. August 19-21, 2013.

On Evaluating and Treating Orthopaedic Pain. Future of Medicine Summit, Palm Beach, FL. October 11, 2013.

Is There A Chondroprotective Effect Of Autologous Protease Inhibitor Concentrate (APIC) In An Osteoarthritis (OA) Rabbit Model? Browning, S; Cuellar, V, Cuellar, J, Scuderi, GJ. Weiser, A; Golish, SR; Hanna. EOA Annual Meeting. Miami Beach, Fl. October 30 – November 2, 2013.

Wasterlain A, Golish, S., Reed, M, Braun, H, Scuderi, GJ. Drivers of Quality and Outcomes in Spine Surgery: Perceptions Among Medical Device Representatives. EOA Annual Meeting. Miami Beach, Fl. October 30–November 2, 2013.

Diagnosing and Treating Spine and Joint Related Pain: Harnessing The Body’s Own Defense Mechanism. Eastern Pain Summit. Boston MA. September 25, 2014.

Diagnosing and Treating Spine and Joint Related Pain: Harnessing The Body’s Own Defense Mechanism.

Eastern Pain Summit. Boston MA. September 25, 2014.

Diagnosing and Treating Spine and Joint Related Pain: The Frontier Within: Grand Rounds Cedars Sinai.

Los Angeles, CA. November 5, 2014.

Diagnosing and Treating Spine and Joint Related Pain: Harnessing the Body’s Own Defense Mechanism.

8th Annual Pain Summit West. San Francisco, CA. November 6, 2014.

Molecular Markers in DDD. Turnberry Isle, Miami, FL May 16, 2015.

Orthopaedic Grand Rounds: UCLA, Cedars Sinai. Osteoarthritis: Is There a Frontier Within? June 18, 2015

Protease Inhibition Technology. MSKUS Diagnostic Course. June 20, 2015 Avon, CT; July 18 LA, CA.

Disruptive Autologous Therapy. Webinar. Bioheart CME course. June 30, 2015

Improving Response to Treatment for Patients with DDD by the use of Molecular Markers. **Best Paper Award**

International Spine Intervention Society. Las Vegas, NV July 28-31, 2015.

Protease Inhibition Technology. Pain Week. September 23, 2015 VA Hospital Riviera, FL.

Diagnosing and Treating Spine and Joint Related Pain: Harnessing The Body’s Own Defense Mechanism.

Regenerative Medical Conference. October 16, 2015 Jacksonville, FL

Fibronectin-Aggrecan Complex (FAC) As a Predictor of Back Pain Relief After Intradiscal Injection of Autologous Alpha-2-Macroglobulin (A2M). Academy of Regenerative Practices. February 5-7, 2016.

Machined A2M recombinant protein better then wild type for stopping arthritis in a small animal model, and the link to the disc. SSG. Miami, FL May 6-7, 2016.

Understanding pain and inflammation associated with high levels of FAC and potential Treatment with Alpha-2-macroglobulin (A2M). Boston BioLife Conference. Hyatt, Boston, FL July 16,17, 2016.

Alpha-2-Macroglobulin for Osteoarthritis. Napa Pain Conference. Meritage Resort. August 25-27, 2016 Napa Valley, CA

Understanding pain and inflammation associated with high levels of FAC and potential Treatment with Alpha-2-macroglobulin (A2M). AAOM Clearwater. FL April 18: Boston BioLife meeting: Orlando, FL May 8: Chicago, IL, Sept 11,

Biochemistry of Alpha-2-Macroglobulin (A2M), Regenerative Medicine, Dallas, Tx, November 12, 2016.

OA and Orthopedic Applications for Regenerative Medicine. World Stem Cell Summit. WPB, FL December 7, 2016

Biochemistry of Alpha-2-macroglobulin (A2M). Hilton San Diego, CA, January 21, 2017

Protease Inhibition Technology Using Alpha 2 Macroglobulin to Treat Inflammatory Conditions. IOF 2nd Annual Conference. Omni-Interlocken Hotel, Broomfield, CO. February 17, 2017.

The Role of Protease Inhibition in Wound Care. Wound Care Summit. Marriott Metro, Washington D.C. March 11, 2017

Intradiscal Injection of an Autologous Alpha-2-Macroglobulin (A2M) Concentrate Alleviates Back Pain in FAC-Positive Patients. AAOS. San Diego, CA. March 14, 2017

Biochemistry of Alpha-2-macroglobulin (A2M). Boston BioLife, Miami Brickell Marriot, Miami, FL, April 1, 2017, Denver Marriot, Denver, CO, May 20, 2017; Hyatt, Philadelphia, PA, July 15, 2017

Intradiscal Injection of an Autologous (A2M) Concentrate Alleviates Back Pain in FAC-Positive Patients.

8th TOBI Regenerative Medicine Meeting. Wynn Las Vegas, NV. June 9-11, 2017

Biochemistry of Alpha-2-macroglobulin (A2M). Boston BioLife, Lakeaway Resort, Austin, TX, September 16, 2017.

Biochemistry of Alpha-2-macroglobulin (A2M). Bendcare Reimagining Rheumatology Summit, Marriott Harbor Beach Resort & Spa, Ft. Lauderdale, FL. December 3, 2017

1: Foraminal and Far Lateral HNPs –To Fuse or Not to Fuse. 2: Osteoconductive Products: Here's the Skinny

Orthopaedic Summit 2017: Evolving Techniques, Bellagio, Las Vegas, NV December 9, 2017

Biochemistry of Alpha-2-macroglobulin (A2M). Boston BioLife, Miami Airport Hilton, Miami, FL, February 9-11, 2018

IOF Singularity, IRAP, A2M, Exosomes: Do We Even Need Cells? Omni, Broomfield, CO. February 15-17, 2018.

Spinal Diagnostics to A2M (How did we get here?) Spine IEP. Fairmont San Francisco CA November 17, 2018.

Biochemistry of Alpha-2-macroglobulin (A2M). Boston BioLife, Championsgate Hotel, Orlando, FL, December 1-2, 2018

1: Degenerative Scoliosis, and Neurogenic Claudication – How Much Is Too Much, How Far Should We Go?   
Is Decompression Alone An Option? 2: What is Out There: Synthetics, Allografts, What Is Going On?

Orthopaedic Summit 2018: Evolving Techniques, Bellagio, Las Vegas, NV December 7,8, 2018

Biochemistry of Alpha-2-macroglobulin (A2M). Biochemistry of Stem Cell Science & Regenerative Medicine in Clinical Practice, Colonnade Hotel, Coral Gables FL, February 15, 2019

Biochemistry of Alpha-2-macroglobulin, AAOM 36th Ann Conf. Grand Hyatt. Denver, CO. May 3, 2019

Understanding pain and inflammation associated with high levels of FAC and potential Treatment with Alpha-2-macroglobulin (A2M). Boston BioLife Conference. Hyatt, Boston, FL July 28, 29, 2019: Marriott, Dallas, TX October 5,6, 2019.

Alpha-2-macroglobulin – CARE Orlando. Marriott Lake Mary, Orlando, FL. March 6, 2021.

Biochemistry of Alpha-2-macroglobulin, BBL, Hyatt Dallas June 4,5, 2021; Lowes Coronado, CA, September 24,25, 2021

1: STEM Cell Magic, 2: Central Cord Syndrome, My Algorithm. Orthopaedic Summit 2021: Evolving Techniques, Bellagio, Las Vegas, NV December 12, 2021

**COURSES ATTENDED:**

Hand Surgery Review Course. Miami, FL - October 1988.

26th Ann Seminar in Musculoskeletal Pathology. St. Augustine, FL - April 1989.

Sports Medicine Update. Miami, FL - April 1989

Update on Foot and Ankle. Atlanta, GA - November 1990.

Palm Beach Spinal Update. Palm Beach, FL - January 1991.

AO/ASIF Basic Course for Residents. Chicago, IL - January 1991.

Current Concepts of Diagnosis and Treatment. Spine Study Group. Scottsdale, AZ - October 1991.

Intramedullary Nailing of Long Bones. New Orleans, LA - November 1991.

Update on Hip and Knee Surgery. Snowmass, CO - January 1992.

Spinal Instrumentation: ISOLA. Miami Beach, FL - March 1992.

Current & Controversial Problems for the Spine Surgeon: An Advanced Course. Miami Beach, FL - April 1992.

San Diego Spine Symposium. San Diego, CA - Nov. 19-21, 1992.

Cervical Spine Research Society’s 20th An Meeting. Palm Desert, CA - December 3-5, 1992.

EBI Systems, Parsippany, New Jersey. January 22, 1993.

Spine Study Group 9th Symposium: Current Concepts of Diagnosis and Treatment. Naples, FL - April 28 - May 2, 1993.

Complications in Spine Surgery. San Diego, CA - June 3-6, 1993.

American Orthopedic Association. San Diego, CA - June 4-9, 1993.

National Association of Spine Surgeons. San Diego, CA October 14-16, 1993.

Florida Orthopedic Society. Palm Beach, FL - November 4-7, 1993.

European Cervical Spine Research Society. Rome, Italy June 28 - July 2, 1995.

Spine Focus Group. Palm Beach, FL - November 10-13, 1994.

International Meeting on Advanced Spine Techniques. April 1995. Acromed: Advanced Course on Anterior Reconstruction Thoracolumbar Spine. Oakland, CA - February 10-11, 1997.

DePuy Course: Spinal Instrumentation. Squaw Valley, CA March 23-25, 1997.

Surgical Dynamics: Ray Threaded Fusion Cage. Ft. Lauderdale, FL. April 5, 1997.

P.M. Medical Inc. Aesculap Top Loading Titanium Spinal Instrumentation System. Boca Raton, FL May 15-18, 1997.

Advanced Techniques in Spinal Instrumentation. Toronto Ca April 26,7, 1997.

NYDIC MRI Focus Group - Open MRI of Coral Gables, NY. June 13-15, 1997.

Sulzer/Spine Tech: BAK Lumbar Interbody Fusion System Certification August 9, 1997.

Acromed lecturer in Bogotá, Colombia, for Dr. Carlos Montero. Bogotá, Colombia - December 2, 1997.

Advanced Instrumentation of the Spine, Breckenridge, CO. Feb. 11 - 14, 1999

Update on Ray Cage Instrumentation, Nassau, Bahamas, Feb. 11 - 13, 2000.

Guest Lecturer; Discogenic Back Pain, American Academy of Pain Management, New Orleans, LA. Feb. 24 - 27, 2000.

Think Tank Presentation. Sofamor Danek. Puerto Rico. March 30 - April 2, 2000.

TLIF Surgery/Anterior Procedures. ISOLA with Dr. Vaccaro, A., and Dr. Albert. Philadelphia, PA. June 7 - 9, 2000.

Cox-2 Update/Training - Merck. Key Largo, FL. July 22 - 23, 2000.

Spine Concepts Update: Depuy. NYC, NY. Aug. 24 - 26, 2000.

Florida Workman’s Compensation Annual Meeting. Orlando, FL. September 24-27, 2000.

Vertebroplasty Training: Osteomedics. Sarasota, FL. Oct. 19, 2000

Spine Education Summit: Acromed. Bal Harbour, FL. Nov 17-18, 2000

Spine Education Summit: Depuy-Acromed, Vail, CO. Feb. 4-7, 2001

Vertebroplasty Advanced Training: Osteomedics. Dallas, TX. Feb 16,17. 2001.

13th Symposium –Spine Study Group, Faculty, Management of Spinal Disorders –Palm Beach, FL, April 18-21, 2002

Spring Clinical Day 2002, University at Buffalo School of Medicine and Biomedical Sciences, April 27, 2002

Emerging Concepts in Spine Surgery: Controversies and Challenges in the Spine Surgeon’s Practice. Health Stream Education Design, Key Largo, Florida, May 3-4, 2002

Prevention of Medical Errors, Parkway Medical Center, N. Miami Beach, Florida, May 12, 2002

AO Principles Related to Spine Surgery, Course for Operating Room Personnel, Panama City, FL, September 7, 2002.

Cervical Spine Research Society 13th An Meeting, Miami Beach, Florida, December 5–7, 2002.

6th Annual Pain Management Symposium, The Cleveland Clinic. Orlando, FL Feb 21-23, 2004.

NASS Spring Break, Boca Raton, FL April 22-24, 2004

Florida Worker’s Compensation Annual Meeting. Orlando, FL. August 25-27, 2004.

Florida Orthopaedic Society. Sarasota, FL. May 20-22, 2005.

Florida Worker’s Compensation Annual Meeting. Orlando, FL. August 22-23, 2005.

NASS 20th Annual Meeting, Philadelphia, PA. September 27-30, 2005.

Cervical Spine Research Society 34th Ann Meeting, WPB, Florida, December 5–7, 2006.

NASS 22nd Annual Meeting, Austin TX. October 23-27, 2007

Cervical Arthroplasty,(Prestige) Medtronic. Orlando, Fl. Feb 26, 2008

Orthopaedic Research Society, San Francisco, Ca. March 2-5. 2008

Advanced Cervical Arthroplasty, (Pro Disc) Synthes. Charlotte, NC. June 29, 2008

63rd Annual Workers Compensation Conference. Orlando, Fl Aug 17-20. 2008

NASS 23rd Annual Meeting, Toronto, On. October 14-18, 2008

Trans1 AxiaLIF course Stanford University Medical Center. June 12, 2009

Titan Spine Napa Valley August 7-8, 2009

NASS 24th Annual Meeting, San Francisco, CA. November 12-16, 2009

Baxano IO-Flex training, Ft. Lauderdale, FL. January 16, 2010

Depuy Spine: Advance Techniques in Minimally Invasive Spine Surgery, Miami, FL January 21-22, 2010

Innovative Techniques in Spine Surgery, 7th Annual Meeting, Los Cabos, Mexico. June 17-19, 2010

World Forum for Spine Research Montreal, Canada. July 7, 2010.

Complications in Spine Surgery. Jackson, WY. August 25-28, 2010. Moderator.

NASS 25th Annual Meeting, Orlando, FL. October 6-9, 2010

7th Interdisciplinary World Congress on Low back and Pelvic Pain. Los Angeles, CA. November 12, 2010.

Kyphoplasty. Kyphon Corp. Headquarters. Sunnyvale, CA. December 11, 2010.

TESSA Minimal Invasive Spine San Francisco, CA. March, 1, 2011

World Spine Congress. Barcelona, Spain. March 23-25, 2011.

Nuvasive Advanced Deformity XLIF San Diego, CA. April, 30, 2011

Midas Rex certification Course. Stanford University, July 30, 2011.

Medtronic 0-Arm training September 24, 2011

Annual Meeting of PMR. Orlando, FL. November 17, 2011

NASS 27th Annual Meeting. Dallas, Tx, October 24-27.2011

ASRA Annual Meeting. Miami Beach, FL. November 15, 2012

Annual Meeting of PMR, Atlanta, GA. November 16-18. 2012

Military Disaster Response Certification Naples, FL. December 14-5, 2012

Advanced Concepts in MIS Summit (Depuy) Miami Anatomical Research Center. January 11-12, 2013 Miami, Florida

VerteBRIDGE® Training Course, at the Miami Anatomical Research Center (M.A.R.C.) in Miami, FL, January 26, 2013.

Point Counterpoint. Nuvasive Sponsored Course. Key West. FL. April 12-13, 2013

Florida Orthopedic Society. Ocean Reef, FL May 30-June 1, 2013.

Workers Compensation Annual WCI meeting. Orlando, FL. August 19-21, 2013.

Annual Meeting of PMR. Washington DC. October 4-6, 2013.

Future of Medicine Summit, Palm Beach, FL. October 11, 2013.

Eastern Orthopaedic Association’s Annual Meeting. October 30 – November 2, 2013. Miami Beach, Florida.

Eastern Pain Summit. Boston MA. September 25, 2014.

8th Annual Pain Summit West. San Francisco, CA. November 6, 2014.

Florida Orthopedic Society. Clearwater, FL. June 4-6, 2015.

International Spine Intervention Society. Las Vegas, NV July 28-31, 2015.

Regenerative Medical Conference. October 16, 2015 Jacksonville, FL

Academy of Regenerative Practices. February 5-7, 2016.

AAPM Palm Springs, CA February 19-20, 2016

AAOM Clearwater. FL April 17-18, 2016.

Spine Study Group. University of Miami, Miami, FL. May 6,7, 2016

Boston BioLife Conference. World Center, Orlando, FL May 8, 2016.

Florida Orthopedic Society. World Center, Orlando, FL. May 19-20, 2016

Boston BioLife Conference. Hyatt, Boston, FL July 16,17, 2016.

Napa Pain Conference. Meritage Resort. August 25-27, 2016 Napa Valley, CA

Boston BioLife Conference. Marriott Chicago, IL September 10,11, 2016

Boston BioLife Regenerative Medicine Conference. Intercontinental. Dallas, Tx November 12,13, 2016

World Stem Cell Summit. WPB, FL December 6-9, 2016

Boston BioLife Regenerative Medicine Conference. Hilton San Diego, CA, January 21, 22 2017

IOF 2nd Annual Conference. Omni Hotel, Broomfield, CO. February 17, 2017.

Boston BioLife Regenerative Medicine Conference, Miami Brickell Marriot, Miami, FL, April 1,2, 2017

Boston BioLife Regenerative Medicine Conference, Denver Marriot, Denver, CO, May 20, 21, 2017

TOBI Wynn Las Vegas, NV. June 9-11, 2017

Boston BioLife Regenerative Medicine Conference, Philadelphia Hyatt, Philadelphia, PA, July 15, 16 2017

Boston BioLife Regenerative Medicine Conference, Boston BioLife, Lakeway Resort, Austin, TX, September 16, 2017

Orthopaedic Summit 2017: Evolving Techniques, Bellagio, Las Vegas, NV December 8, 9, 2017

Boston BioLife Regenerative Medicine Conference, Miami Airport Hilton, Miami, FL, February 9-11, 2018

IOF 2nd Annual Conference. Singularity, Broomfield, CO. February 15-17, 2018.

National Association of EMT Tactical Combat Casualty Care Okeechobee, FL. April19, 20, 2018

Spine IEP. Fairmont San Francisco CA November 16-17, 2018.

Hands-on Stem Cell Therapies & Biologics Workshop for the Clinical Application of Pain Management.

Championsgate Hotel, Orlando, FL, December 1-2, 2018

Orthopaedic Summit 2018: Evolving Techniques, Bellagio, Las Vegas, NV December 5-8, 2018

Biochemistry of Stem Cell Science & Regenerative Medicine in Clinical Practice, Colonnade Hotel, Coral Gables FL, February 15, 2019

Aesculap Lumbar Motion Preservation Course, February 22, 23, 2019 Dallas, TX

AAOM 36th Annual Conference “Physician’s Guide for Regenerative Orthopaedic Medicine” Grand Hyatt, Denver, CO

May 2 – 4, 2019

Boston Biolife HANDS-ON Stem Cell Therapies & Biologics Workshop for the Clinical Application of Pain Management, Hyatt, Boston, MA July 28, 29, 2019; Marriott, Dallas, TX October 5,6, 2019;

Relievant Intracept Procedure Marriott Grande Lakes, Orlando, FL. October 19, 2019.

Alpha-2-macroglobulin – CARE Orlando. Marriott Lake Mary, Orlando, FL. March 6, 2021.

Boston Biolife HANDS-ON Stem Cell Therapies & Biologics Workshop for the Clinical Application of Pain Management, Dallas June 4,5, 2021; Lowes, San Diego, CA, September 24,25, 2021.

Orthopaedic Summit 2021: Evolving Techniques, Bellagio, Las Vegas, NV December 11-13, 2021

Attendance @ American Academy of Orthopedic Surgeons:

Anaheim, CA - March 1991 Washington D.C. February 1992

San Fran, CA - February 18-23, 1993 San Fran, CA - February 24 - March 1, 1994

San Fran, CA - February 13-16, 1997 New Orleans, LA -March 19-22, 1998

Orlando, FL-March 16-19, 2000 San Fran, CA.-February 28- March 3, 2001

New Orleans, LA -Feb 6-10, 2003 San Francisco, CA. March 10-14, 2004

San Francisco, CA. March 5-9, 2008 Las Vegas, NV February 25- 28, 2009

New Orleans, LA - March 9-13, 2010 San Diego, CA. February 16-20, 2011

San Francisco, CA. February 6-10, 2012 Chicago, IL. March 20-24, 2013

New Orleans, LA March 11-14, 2014 Las Vegas, NV. March 24-28, 2015

Orlando, FL-March 3-5, 2016 San Diego, CA. March 14-17, 2017

Orlando, FL-March 25-28, 2020 (Virtual) San Diego, CA. Aug 30-Sept 1, 2021