

Richard D. Guyer, M.D.

CURRICULUM VITAE

Office Address: Texas Back Institute
6020 West Parker Road, #200
Plano, Texas 75093

EDUCATION

1964 to 1967 Wissahickon High School, Ambler, Pennsylvania
1967 to 1971 Ursinus College, Collegeville, Pennsylvania
1971 to 1975 University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania

DEGREES

1971 B.S., Ursinus College, Collegeville, Pennsylvania
1975 M.D., University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania

INTERNSHIP

7/75 to 6/76 Parkland Memorial Hospital, Southwestern School of Medicine, Dallas, Texas

RESIDENCY

7/76 to 6/80 Orthopedic Surgery, Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania

FELLOWSHIPS

10/81 Spine Fellowship, Case Western Reserve University with Henry Bohlman, M.D., Cleveland, Ohio
1/82 to 6/82 Spine Fellowship with Leon Wiltse, M.D., Long Beach, California

FACULTY APPOINTMENTS

- 7/76 to 6/80 Assistant Instructor of Orthopedic Surgery, University of Pennsylvania, Philadelphia, Pennsylvania
- 7/76 to 6/77 Research Fellow, Department of Orthopedic Surgery of the University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania
- 7/80 to 10/81 Assistant Professor, Division of Orthopedic Surgery, The University of Texas Medical School at Houston, Houston, Texas
- 7/80 to 10/81 Orthopedic Consultant for the "The Gulf State Hemophilia Diagnostic and Treatment Center", The University of Texas Health Science Center, Houston, Texas
- 10/82 to present Associate Clinical Professor, Southwestern Medical School, Dallas, Texas
- 7/1/86-7/1/93 Co-Director of Spine Clinic, Parkland Hospital, Dallas, Texas
- 7/1/86 to present Fellowship Director, Texas Back Institute, Plano, Texas
- 1/06-1/10 President Texas Back Institute, Plano, Texas
- 1/18 to present Co-Director, Center for Disc Replacement at TBI
- 1/06 to present Chairman, Texas Back Institute Research Foundation

BOARD CERTIFICATION

American Board of Orthopedic Surgery
September, 1981

HONORS AND AWARDS

1971 Graduated Cum Laude from Ursinus College

1996 Volvo Award for Low Back Pain Research

2001 North American Spine Society David Selby Award

2016 Ursinus College Alumni Award

2020 North American Spine Society Leon Wiltse Award

2007 Best Doctors in Dallas

2009-20 Best Doctors in Dallas

2010,13 Best Doctors in the US

2012-20 Best Doctors in Collin County

PROFESSIONAL ORGANIZATIONS AND BOARD MEMBERSHIPS

Texas Medical Association

Harris Medical Society

Collin County Medical Society

Texas Orthopedic Association

Southern Medical Association

Western Orthopedic Association

American Academy of Orthopaedic Surgeons

Cervical Spine Research Society

International Intradiscal Therapy Society

American Back Society

Texas Spine Society

International Society for the Study of the Lumbar Spine

 Nominating Committee

 Lifetime Achievement Committee

International Society for Minimal Intervention in Spinal Surgery

North American Spine Society:

 President

 Treasurer

 Board of Directors, Education Committee

 Fellowship Committee

 Chairman, Diagnostic and Therapeutics Committee

 Japanese Spine Research Society: Spine Across the Sea: NASS program chairman

International Society for the Advancement of Spine Surgery:

 Program Co-Chair; Program Committee

 Fellowship Committee: Chairman

 Membership Committee

American Academy of Orthopaedic Surgeons, Committee on HCFA Request for Evaluation of
Automated Percutaneous Lumbar Discectomy

AO Spine

Transplant Services Center Medical Advisory Board, UT Southwestern Medical Center

American Academy of Orthopaedic Surgeons, Regional Membership Committee

Lumbar Spine Research Society

Private Spine Group

Institute for Spine & Biomedical Research:

 Chairman of the Board of Directors

 Medical Director

Texas Health Research Institute: Chairman of the Board of Directors

Texas Back Institute Research Foundation: Chairman of the Board of Directors

EDITORIAL BOARD MEMBERSHIP

Associate Editorial Board: *Spine*

Reviewer: *The Spine Journal*

Reviewer: *International Journal of Spine Surgery*

Reviewer: *Clinical Orthopaedics and Related Research*

Editorial Board: *Chinese Journal of Bone and Joint*

Peer Review Board: *The University of Pennsylvania Orthopaedic Journal*

COURSE CHAIRMAN

Co-Chairman, 3rd Trans Atlantic Spine Congress; November, 2005; Plano, Texas and Zurich, Switzerland

Co-Chairman, First Annual Spine Arthroplasty Summit; February, 2006; Salt Lake City, Utah

Co-Chairman, Fellows Surgical Technique Course; 2009; Denver, Colorado

Co-Chairman, Total Disc 2012; September, 2012; Zurich, Switzerland

PUBLICATIONS

1. Guyer RD, Booth RE, Rothman RH: Pulmonary Embolism Prophylaxis in Total Hip Patients: A study comparing low dose Coumadin and aspirin. *J Bone Joint Surg* 64A:1040-1044, 1982.
2. Guyer RD: Total Joint Replacement: An Update. *Am Fam Phys* XX:196-201, 1982.
3. Heard CS, Guyer RD, Smith TK: Intramedullary Rodding of the Femur: An Update. *Med J St. Joseph's Hospital* 17(1):29-37, 1982.
4. Wiltse LL, Spencer CW, Guyer RD, Glenn WV, Porter IS: Alar-Transverse Process Impingement of the L5 Spinal Nerve: The Far-Out Syndrome. *Spine* 9:31-41, 1984.
5. Barber FA, Guyer RD, Burton WC: The Heparin-Induced Thrombocytopenia and Thrombosis Syndrome. *J Bone Joint Surg* 69A (6):935-937, 1987.
6. Sachs BL, Vanharanta H, Spivey MA, Guyer RD, Videman T, Rashbaum RF, Johnson RG, Hochschuler SH, Mooney V: Dallas Discogram Description: A New Classification of CT/Discography in Low-Back Disorders. *Spine* 12:287-294, 1987.
7. Vanharanta H, Sachs BL, Spivey MA, Guyer RD, Hochschuler SH, Rashbaum RF, Johnson RG, Ohnmeiss DD, Mooney V: The Relationship of Pain Provocation to Lumbar Disc Deterioration as Seen by CT/Discography. *Spine* 12:295-298, 1987.

8. Vanharanta H, Sachs BL, Spivey MA, Hochschuler SH, Guyer RD, Rashbaum RF, Ohnmeiss DD, Mooney V: A Comparison of CT/Discography, Pain Provocation and Radiographic Disc Height. *Spine* 13:321-324, 1988.
9. Loguidice VA, Guyer RD, Stith WJ, Ohnmeiss DD, Hochschuler SH, Rashbaum RF: Anterior Lumbar Interbody Fusion. *Spine* 13:366-369, 1988.
10. Hochschuler SH, Guyer RD, Stith WJ, Ohnmeiss DD, Rashbaum RF, Johnson, RG: Proplast Reconstruction of Iliac Crest Defects. *Spine* 13:378-379, 1988.
11. Guyer RD, Collier RR, Ohnmeiss DD, Stith WJ, Hochschuler SH, Rashbaum RF, Vanharanta H, Loguidice VA: Extrasosseous Spinal Lesions Mimicking Disc Disease. *Spine* 13:328-331, 1988.
12. Guyer RD, Collier R, Stith WJ, Ohnmeiss DD, Hochschuler SH, Rashbaum RF, Regan JJ: Discitis After Discography. *Spine* 13:1352-1354, 1988.
13. Vanharanta H, Guyer RD, Ohnmeiss DD, Stith WJ, Sachs BL, Aprill C, Spivey M, Rashbaum RF, Hochschuler SH, Videman T, Selby DK, Terry A, Mooney V: Disc Deterioration in Low-Back Syndromes: A Prospective, Multi-Center CT/Discography Study. *Spine* 13:1349-1351, 1988.
14. Vanharanta H, Sachs BL, Ohnmeiss DD, Spivey M, Guyer RD, Rashbaum RF, Hochschuler SH, Stith WJ, Mooney V: Pain Provocation and Disc Deterioration by Age: A CT/Discography Study in Low Back Pain Population. *Spine* 14:420-423, 1989.
15. Sachs BL, Spivey MA, Vanharanta H, Guyer RD, Rashbaum RF, Hochschuler SH, Smith GV, Scala AD: Techniques for Lumbar Discography and CT/Discography in Clinical Practice. *J Applied Radiology* Nov, 1989.
16. Sachs BL, Spivey MA, Vanharanta H, Guyer RD, Rashbaum RF, Hochschuler SH, Scala AD: Techniques for lumbar discography and computed tomography-discography in clinical practice. *Orthop Rev* 19(9):775-778, 1990.
17. Stith WJ, Judy MM, Hochschuler SH, Guyer RD: Choice of Lasers for Minimally Invasive Spinal Surgery. *Orthop Rev* 22(2):137-142, 1991.
18. Sasso RC, Cotler HB, Guyer RD: Diagnostic Imaging Studies for Low Back Pain. *J Musculoskeletal Medicine* 8(5):21-37, 1991.
19. Guyer RD, Ohnmeiss DD: Lumbar Discography and CT/Discography. *The University of Pennsylvania Orthopaedic J* 7:61-63, 1991.
20. Shea DD, Ohnmeiss DD, Stith WJ, Guyer RD, Hochschuler SH, Rashbaum RF: The Effect of Sensory Deprivation on the Reduction of Pain in Chronic Low Back Patients. *Spine* 16(5):560-561, 1991.
21. Guyer RD: Selective Discography, CT/Discography, and Pain Provocation Testing. *Seminars in Orthopaedics* 6(2):90-91, 1991.
22. Guyer RD, Hochschuler SH, Spivey MA, Ohnmeiss DD, Castleman C: Case Report: The Use of Dynamic MRI to Identify Cervical Spine Disc Herniation and Cord Compression. *Spine* 17(5):596-597, 1992.

23. Vanharanta H, Floyd T, Ohnmeiss DD, Guyer RD, Hochschuler SH: The Relationship Between Facet Tropism and Degenerative Disc Disease. *Spine* 18(8):1000-1005, 1993.
24. Guyer RD, Ohnmeiss DD: The Role of Discography and Interdiscal Therapy. *Current Opinion in Orthopaedics*. 5(II):49-53, 1994.
25. Guyer RD, Hochschuler SH: Minimally Invasive Surgical Techniques for the Treatment of the Herniated Lumbar Disc. *Seminars Spine Surg* 6(4):256-261, 1994.
26. Ohnmeiss DD, Guyer RD, Hochschuler SH: Laser Disc Decompression: The Importance of Proper Patient Selection. *Spine* 19(18):2054-2059, 1994.
27. Moneta GB, Videman T, Kaivanto K, Aprill C, Spivey M, Vanharanta H, Sachs B, Guyer RD, Hochschuler S, Rashbaum R: Reported pain during lumbar discography as a function of annular disruption and disc degeneration. *Spine* 19:1968-1974, 1994.
28. Weinhoffer SL, Guyer RD, Herbert M, Griffith SL: In-Vitro Intradiscal Pressure Measurements Above a Simulated Instrumented Fusion. *Spine* 20(5):526-531, 1995.
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30. Bogdanffy GM, Ohnmeiss DD, Guyer RD: Early Changes in Bone Mineral Density above a Combined Anterior-Posterior L4-S1 Lumbar Spinal Fusion: A Clinical Investigation. *Spine* 20(15):1674-1678, 1995.
31. Guyer RD, Ohnmeiss DD: Contemporary Concepts in Spine Care: Lumbar discography. Position Statement from the North American Spine Society Diagnostic and Therapeutic Committee. *Spine* 20(18):2048-2059, 1995.
32. Herzog RJ, Guyer RD, Graham-Smith A, Simmons ED Jr. Magnetic resonance imaging. Use in patients with low back or radicular pain. Position Statement from the North American Spine Society. *Spine* 20(16):1834-1838, 1995.
33. Griffith SL, Weinhoffer SL, Shelokov AP, Guyer RD, Contiliano J, Geiger J: Biomechanical Comparison of Anterior Instrumentation for the Cervical Spine. *J Spinal Disord* 8(6):429-438, 1995.
34. Simmons ED Jr, Guyer RD, Graham-Smith A, Herzog R. Radiographic assessment for patients with low back pain. Position Statement from the North American Spine Society. *Spine* 20(16):1839-1841, 1995.
35. Block AR, Vanharanta H, Ohnmeiss DD, Guyer RD: Discographic Pain Reports: Influence of Psychological Factors. *Spine* 21(3):334-338, 1996.
36. Gronblad M, Virri J, Ronkko S, Kiviranta I, Vanharanta H, Seitsalo S, Rashbaum R, Guyer R: 1996 Volvo Award; A Controlled Biochemical and Immunohistochemical Study of Human Synovial Type (Group 11) Phospholipase A2 and Inflammatory Cells in Macroscopically Normal, Degenerated and Herniated Human Lumbar Disc Tissue. *Spine* 21(22):2531-2538, 1996.

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38. Guyer RD, Ohnmeiss DD: [letter] Response to Fraser's comments on Lumbar Discography Position Statement. *Spine* 21(10):1275-1276, 1996.
39. Guyer RD, Ohnmeiss DD, Mason SL, Shelokov AP: Complications of Cervical Discography: Findings in a Large Series. *J Spinal Disord* 10(2):95-101, 1997.
40. Jarolem K, Tucker WA, Fulp T, Guyer RD: Rigid Intrasegmental Fixation for Repair of a Symptomatic Pars Defect in a Young Athlete: A Case Report and Description of Technique. *J Spin Disord* 10(3):253-255, 1997.
41. Regan JJ, Guyer RD: Endoscopic Techniques in Spinal Surgery. *Clin Orthop* (335):122-39, 1997.
42. Goodwin CB, Brighton CT, Guyer RD, Johnson JR, Light KI, Yuan HA: A Double-Blind Study of Capacitively Coupled Electrical Stimulation as an Adjunct to Lumbar Spinal Fusion. *Spine* 24(13):1349-1357, 1999.
43. Ohnmeiss DD, Guyer RD, Mason SL: Relationship of Cervical Discographic Pain Responses to Radiographic Images. *Clin J Pain* 16(1):1-5, 2000.
44. Ohnmeiss DD, Guyer RD: Provocative Discography for Diagnostic Purposes in Patients with Discogenic Pain - Its Therapeutic Implications. *Current Anesthesiology Reports* 2(3):175-180, 2000.
45. Block AR, Ohnmeiss DD, Guyer RD, Rashbaum RF, Hochschuler SH: The Use of Presurgical Psychological Screening to Predict the Outcome of Spine Surgery. *Spine J* 1(4):274-282, 2001.
46. Guyer RD, Burton DC: Differential Diagnosis of Spinal Disorders. In Fardon et al (eds): *Orthopaedic Knowledge Update: Spine*. American Academy of Orthopaedic Surgeons; Rosemont, Illinois, 2002 pp. 87-96.
47. Hochschuler SH, Ohnmeiss DD, Guyer RD, Blumenthal SL: Artificial Disc: Preliminary Results of a Prospective Study in the United States. *European Spine J* 11(Suppl 2):S106-110, 2002.
48. Blumenthal SL, Ohnmeiss DD, Guyer R, Hochschuler S, McAfee P, Garcia R, Salib R, Yuan H, Lee C, Bertagnoli R, Bryan V: Artificial Discs and Beyond: A North American Spine Society Annual Meeting Symposium. *Spine J* 2(6):460-463, 2003.
49. Gronblad M, Habtemariam A, Virri J, Seitsalo S, Vanharanta H, Guyer RD: Complement Membrane Attack Complexes in Pathologic Disc Tissues. *Spine* 28(2):114-118, 2003.
50. Guyer RD, Ohnmeiss DD: Intervertebral Disc Prostheses. *Spine* 28(15S):S15-S23, 2003.
51. Chang Y, Guyer RD, Ohnmeiss DD, Moore S: Case Report: Intra-operative Left Common Iliac Occlusion in a Scheduled 360 Degree Spinal Fusion. *Spine* 28(16):E316-E319, 2003.
52. Guyer RD, Ohnmeiss DD: Contemporary Concepts Reviews: Lumbar Discography. *Spine J* 3(3S):11S-17S, 2003.

53. Herzog RJ, Ghanayem AJ, Guyer RD, Graham-Smith A, Simmons ED: Contemporary Concepts Reviews: Radiographic Assessment for Patients with Low Back Pain. *Spine J* 3(3S):6S-10S, 2003.
54. Simmons ED, Guyer RD, Graham-Smith A, Herzog R: Contemporary Concepts Reviews: Magnetic Resonance Imaging: Use in Patients with Low Back Pain or Radicular Pain. *Spine J* 3(3S):3S-5S, 2003.
55. Blumenthal SL, Ohnmeiss DD, Guyer RD, Hochschuler SH: Prospective Study Evaluating Total Disc Replacement: Preliminary Results. *J Spinal Disord Tech* 16(5):450-454, 2003.
56. Geisler FH, Blumenthal SL, Guyer RD, McAfee PC, Regan JJ, Johnson JP, Mullin B: Neurological Complications of Lumbar Artificial Disc Replacement and Comparison of Clinical Results with those Related to Lumbar Arthrodesis in the Literature: Results of a Multicenter, Prospective, Randomized Investigational Device Exemption Study of Charité Intervertebral Disc. *J Neurosurg Spine* 1(2):143-154, 2004.
57. Guyer RD, McAfee PC, Hochschuler SH, Blumenthal SL, Fedder IL, Ohnmeiss DD, Cunningham BW: Prospective Randomized Study of the Charité Artificial Disc: Data from Two Investigational Centers. *Spine J* 4(6 Suppl):252S-259S, 2004.
58. Blumenthal SL, McAfee PC, Guyer RD, Hochschuler SH, Geisler FH, Holt RT, Garcia R Jr, Regan JJ, Ohnmeiss DD: A Prospective, Randomized, Multi-Center FDA IDE Study of Lumbar Total Disc Replacement with the CHARITÉ™ Artificial Disc vs. Lumbar Fusion: Part I – Evaluation of Clinical Outcomes. *Spine* 30(14):1565-1575, 2005.
59. McAfee PC, Cunningham B, Holtsapple G, Bussard-Adams K, Blumenthal S, Guyer RD, Dmietriev A, Maxwell J, Regan J, Isaza J: A Prospective, Randomized, Multi-Center FDA IDE Study of the Charité™ Artificial Disc: A Radiographic Outcomes Analysis, Correlation of Surgical Technique Accuracy with Clinical Outcomes, and Evaluation of the Learning Curve. *Spine* 30(14):1576-1583, 2005.
60. McAfee PC, Guyer RD: History and Design Rationale for the CHARITÉ Artificial Disc. *Lumbar Spine Arthroplasty: Volume I*. Quality Medical Publishing. St. Louis, MO, 2005; pp. 13-28.
61. Blumenthal SL, Guyer RD: Indications, Contraindications, and Radiographic Evaluation. *Lumbar Spine Arthroplasty: Volume II*. Quality Medical Publishing. St. Louis, MO, 2005; pp. 3-16.
62. Blumenthal SL, Guyer RD: IDE Clinical Studies: Results of a Prospective, Randomized, Multicenter, FDA-Controlled Clinical Trial. *Lumbar Spine Arthroplasty: Volume II*. Quality Medical Publishing. St. Louis, MO, 2005; pp. 17-38.
63. Blumenthal SL, Guyer RD, Cappuccino A: Discectomy. *Lumbar Spine Arthroplasty: Volume III*. Quality Medical Publishing. St. Louis, MO, 2005; pp. 17-39.
64. Tolonen J, Gronblad M, Vanharanta H, Virri J, Guyer RD, Rytomaa T, Karaharju EO: Growth Factor Expression in Degenerated Intervertebral Disc Tissue an Immunohistochemical Analysis of Transforming Growth Factor Beta, Fibroblast Growth Factor and Platelet-Derived Growth Factor. *Eur Spine J* 15(5):588-96, 2006.

65. Small S, Guyer RD, Ohnmeiss DD: Faces of Spine Care: From the Procedure Room: When Spinal Injection Becomes Advanced Imaging. *Spine J* 6(1):96-97, 2006.
66. Guyer RD, Elders G: Disc Prosthesis for Lumbar Degenerative Disease and Axial Instability –CHARITÉ Artificial Disc. *Seminars in Spine Surgery* 17(4):297-309, 2005.
67. Dickerman RD, Guyer RD: [Letter to the Editor] Intraoperative Electromyography for Lateral Mass and Pedicle Screws: Technique is the Key! *J Spinal Disord Tech* 19(6):463, 2006.
68. McAfee PC, Geisler FH, Saiedy SS, Moore SV, Regan JJ, Guyer RD, Blumenthal SL, Fedder IL, Tortolani PJ, Cunningham B: Revisibility of the CHARITÉ Artificial Disc Replacement: Analysis of 688 Patients Enrolled in the U.S. IDE Study of the CHARITÉ Artificial Disc. *Spine* 31(11):1217-1226, 2006.
69. Dickerman RD, Guyer RD, Hisey MS: [Letter to the Editor commenting on article: Automated Intraoperative EMG Testing during Percutaneous Pedicle Screw Placement.] *Spine J* 6(4):473, 2006.
70. Regan JJ, McAfee PC, Blumenthal SL, Guyer RD, Geisler FH, Garcia R, Maxwell, JH. Evaluation of Surgical Volume and the Early Experience with Lumbar Total Disc Replacement as Part of the Investigational Device Exemption Study of the Charité Artificial Disc. *Spine* 31(19):2270-2276, 2006.
71. Guyer RD, Patterson M, Ohnmeiss DD: Failed Back Surgery Syndrome: Diagnostic Evaluation. *J Am Acad Orthop Surg* 14(9):534-43, 2006.
72. Cunningham BW, DeMuth GE, McAfee PC, Scott-Young M, Yoon KJ Blumenthal SL, Guyer RD, Geisler FH, Regan, JJ, Conix B, Hes R, Pimenta L, Diaz R, Fedder IL, Stadlan NY, Tortolani PJ: Survivorship Analysis of the CHARITE Artificial Disc: Review of 1,938 Patients from Eight Leading International Spine Centers. *Roundtables in Spinal Surgery: Long Term Results of Lumbar Arthroplasty* 1(4):31-37, 2006.
73. Guyer RD, Tromanhauser SG, Regan JJ: An Economic Model of One-Level Lumbar Arthroplasty vs. Fusion. *Spine J* 7(5):558-562, 2007.
74. Blumenthal SL, Guyer RD, Geisler FH, McAfee PC, Regan JJ: The First 18 Months Following FDA Approval of Lumbar Total Disc Replacement in the United States: Reported Adverse Events Outside an IDE Study Environment. *SAS J* 1(1):8-11, 2007.
75. Holt R, Majd M, Isaza J, Blumenthal S, McAfee P, Guyer R, Hochschuler S, Geisler F, Garcia R, Regan J: Complications of Lumbar Artificial Disc Replacement vs. Fusion: Results from the Randomized, Multicenter FDA IDE Study of the CHARITÉ Artificial Disc. *SAS J* 1(1):20-27, 2007.
76. Guyer RD: North American Spine Society Presidential Address: The Paradox in Medicine Today - Exciting Technology and Economic Challenges. *Spine J* 8(2):279-285, 2008.
77. Geisler FH, Guyer RD, Blumenthal SL, McAfee PC, Cappuccino A, Bitan F, Regan JJ. Patient selection for lumbar arthroplasty and arthrodesis: the effect of revision surgery in a controlled, multicenter, randomized study. *J Neurosurg Spine* 8(1):13-16, 2008.

78. Cunningham BW, McAfee PC, Geisler FH, Holsapple G, Adams K, Blumenthal SL, Guyer RD, Cappuccino A, Regan JJ, Fedder IL, Tortolani PJ. Distribution of in vivo and in vitro range of motion following 1-level arthroplasty with the CHARITÉ artificial disc compared with fusion. *J Neurosurg Spine* 8(1):7-12, 2008.
79. Guyer RD, Geisler FH, Blumenthal SL, McAfee PC, Mullin BB: Effect of Age on Clinical and Radiographic Outcomes and Adverse Events Following 1-level Lumbar Arthroplasty after a Minimum 2-year Follow-up. *J Neurosurg Spine* 8(2):101-107, 2008.
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81. Guyer RD, Siddiqui S, Zigler JE, Ohnmeiss DD, Blumenthal SL, Sachs BL, Hochschuler SH, Rashbaum RF: Lumbar Spinal Arthroplasty: Analysis of One Center's 20 Best and 20 Worst Clinical Outcomes. *Spine* 33(23):2566-2569, 2008.
82. Guyer RD: North American Spine Society Presidential Address: The Paradox in Medicine Today - Exciting Technology and Economic Challenges. [Translated into Chinese]. *Chinese J Spine Spinal Cord* 18(12):887-890, 2008.
83. Guyer RD, Shellock J: Total Disc Replacement at the Texas Back Institute: Our Journey Over the Past 18 Years. *Coluna/Columna* 7(4):390-396, 2008.
84. Rohan MX Jr, Ohnmeiss DD, Guyer RD, Zigler JE, Blumenthal SL, Hochschuler SH, Sachs BL, Rashbaum RF: Relationship between the Length of Time Off Work Pre-operatively and Clinical Outcome at 24-month Follow-up in Patients Undergoing Total Disc Replacement or Fusion. *Spine J* 9(5):360-365, 2009.
85. Guyer RD, McAfee PC, Banco RJ, Bitan FD, Cappuccino A, Geisler FH, Hochschuler SH, Holt RT, Jenis LG, Majd M, Regan JJ, Tromanhauser SG, Wong DC, Blumenthal SL: Prospective, Randomized, Multicenter Food and Drug Administration Investigational Device Exemption Study of Lumbar Total Disc Replacement with the CHARITÉ Artificial Disc Versus Lumbar Fusion: Five-Year Follow-up. *Spine J* 9(5):374-386, 2009.
86. Geisler FH, McAfee PC, Banco RJ, Blumenthal SL, Guyer RD, Holt RT, Majd ME: Prospective, Randomized, Multicenter FDA IDE Study of CHARITÉ Artificial Disc vs. Lumbar Fusion: Effect at 5-year Follow-up of Prior Surgery and Prior Discectomy on Clinical Outcomes Following Lumbar Arthroplasty. *SAS J* 3(1):17-24, 2009.
87. Dickerman RD, Reynolds A, Zigler J, Guyer R: [Letter] Adjacent Segment Degeneration. *J Neurosurg Spine* 10(2):177, 2009.
88. Guyer RD, Ohnmeiss DD: Advancements in Spinal Surgery. *US Musculoskeletal Review* 4:47-50, 2009.
89. Ohnmeiss DD, Guyer RD: 24-Month Follow-up for Reporting Results of Spinal Implant Studies: Is This Guideline Supported by the Literature? *SAS J* 3:100-107, 2009.
90. Smith HE, Rihn JA, Brodke D, Guyer R, Coric D, Lonner B, Shelokov AP, Currier BL, Riley L, Phillips FM, Albert TJ: Spine Care: Evaluation of the Efficacy and Cost of Emerging Technology. *Amer J Med Quality* 24:(6 Suppl): 25S-31S, 2009.

91. Guyer RD: Re: “Prospective, Randomized Multicenter Food and Drug Administration Investigational Device Exemption Study of Lumbar Tool Disc Replacement with the CHARITE Artificial Disc Versus Lumbar Fusion: Five-Year Follow-Up”. *Spine J* 10(4):360, 2010.
92. Guyer RD, Shellock J, MacLennan B, Hanscom D, Knight RQ, McCombe P, Jacobs JJ, Urban RM, Bradford D, Ohnmeiss DD: Early Failure of Metal-on-Metal Artificial Disc Prostheses Associated with Lymphocytic Reaction: Diagnosis and Treatment Experience in 4 Cases. *Spine* 36(7):E492-E497. 2011.
93. Coric D, Nunley PD, Guyer RD, Musante D, Laurysen C: Response to Letter to the Editor by Hadley MN *J Neurosurg: Spine* 15:345-347, 2011.
94. Coric D, Nunley PD, Guyer RD, Musante D, Carmody C, Gordon C, Laurysen C, Ohnmeiss DD, Boltes MO: Prospective, Randomized, Multicenter Study of Cervical Arthroplasty: 269 Patients from the Kineflex®|C Artificial Disc IDE Study with Minimum Two Year Follow-up. *J Neurosurg Spine* 15(4):348-358, 2011.
95. Glenn JS, Yaker J, Guyer RD, Ohnmeiss DD: Anterior Discectomy and Total Disc Replacement for Three Patients with Multiple Third and Fourth Recurrent Lumbar Disc Herniations. *Spine J* 11(9):e1-e6, 2011.
96. Lieberman IH, Hardenbrook MA, Wang JC, Guyer RD: Assessment of Pedicle Screw Placement Accuracy, Procedure Time, and Radiation Exposure Using a Miniature Robotic Guidance System. *J Spinal Disord Tech* 25(5):241-248, 2012.
97. McGrory J, Guyer RD: Can Fusion for Back Pain Alone Be Defended? *Seminars Spine Surg* 23:227-234, 2011.
98. Tepper G, Ohnmeiss DD, Guyer RD: Retrograde Ejaculation—Make It Count. *SpineLine XII*(6):37-38, 2011.
99. Guyer RD, Thongtrangan I, Ohnmeiss DD: Anterior Lumbar Arthroplasty. *Seminars Spine Surg* 24:32-36, 2012.
100. Lieberman IH, Hardenbrook MA, Wang JC, Guyer RD: Assessment of Pedicle Screw Placement Accuracy, Procedure Time, and Radiation Exposure Using a Miniature Robotic Guidance System. *J Spinal Disord Tech* 25(5):241-248, 2012.
101. Rainey S, Blumenthal SL, Zigler JE, Guyer RD, Ohnmeiss DD: Analysis of Adjacent Segment Re-Operation Following Lumbar Total Disc Replacement. *Int J Spine Surg* 6:140-144, 2012.
102. Blumenthal SL, Ohnmeiss DD, Guyer RD, Zigler JE: Re-operations in Cervical Total Disc Replacement Compared with Anterior Cervical Fusion: Results Compiled from Multiple Prospective FDA IDE Trials Conducted at a Single Site. *Spine* 38(14):1177–1182, 2013.
103. Guyer RD, Pettine K, Roh JS, Dimmig TA, Coric D., McAfee, PC, Ohnmeiss DD: Comparison of Two Lumbar Total Disc Replacements: Results of a Prospective, Randomized, Controlled Multicenter Food and Drug Administration Trial with 24-month Follow-up. *Spine* 39(12):925-931, 2014.

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103. Guyer RD: Minimally Invasive Spine Surgery. American Academy of Orthopaedic Surgeons Practical Anatomy and Surgery Technique Workshop. April, 1999; St. Louis, Missouri.
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105. Guyer RD: Metabolic Bone Disease. University of Texas Southwestern Medical School; Orthopaedic Board Examination Review Course. May, 1999; Dallas, Texas.
106. Guyer RD: Laparoscopic vs. Open Procedures. Minimally Invasive Technologies: Medicine in the 21st Century Symposium. May, 1999; Dallas, Texas.
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124. Guyer RD: Spine Anatomy and Disc Related Pain. Spine Care of the Injured Worker conference. June, 2002; Plano, Texas.
125. Guyer RD: SB Charité III: Cirugia de Reemplazo Por Disco Artificial. Curso Teorico Practico. August, 2002; Santiago, Chile.
126. Guyer RD: Diagnostic Work-up of Spinal Instability. Dynamic Spine Stabilization. October, 2002; Plano, Texas.
127. Guyer RD: Assessing the Damage: Diagnostic Imaging. Managing the Low Back “Train Wreck” Conference. November, 2002; Plano, Texas.
128. Guyer RD: Experience with Allografts in Spine Surgery. What’s New in Orthopaedic Grafting Techniques and Tissue Banking. November, 2002; Dallas, Texas.
129. Guyer RD: Assessing Axial Low Back Pain, Where Are We? (Symposium: Stabilizing Low Back Pain). North American Spine Society; November, 2002; Montreal, Canada.
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132. Guyer RD: Results of SB Charité: Historical. Spinal Arthroplasty Society, May, 2003; Phoenix, Arizona.
133. Guyer RD: Clinical and Radiologic Diagnostics for Spinal Motion Abnormalities. Spinal Arthroplasty Society, May, 2003; Phoenix, Arizona.
134. Guyer RD: Fusion vs. Motion: Pro Fusion. (Debate) Spinal Arthroplasty Society, May, 2003; Phoenix, Arizona.
135. Guyer RD: Disc Replacement and Early US Results. Brazilian Spine Society. June, 2003; Fortaleza, Brazil.
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144. Guyer RD: Clinical Diagnostics for Spinal Motion Abnormality. *Dynamic Spine Stabilization*. November, 2003; Plano, Texas.
145. Guyer RD: Unconstrained: Link SB Charité' III Disc (U.S. Experience). *Dynamic Spine Stabilization*. November, 2003; Plano, Texas.
146. Guyer RD: Principles of Dynamic Stabilization. *Non-Fusion Technology "A State of The Art Debate"*. December, 2003; New York, New York/Zurich, Switzerland.
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165. Guyer RD: Charité. Innovative Techniques in Spine Surgery. August, 2004; Los Cabos, Mexico.
166. Guyer RD: Surgical techniques and FDA data. International Symposium Non-Fusion techniques in Spinal Surgery. September, 2004; Milan, Italy.

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172. Guyer RD: The Case for Motion. Emerging Technologies in Spine Surgery. September - October, 2004; Washington, D.C.
173. Guyer RD: Clinical Experience with Charité. Emerging Technologies in Spine Surgery. September - October, 2004; Washington, D.C.
174. Guyer RD: MIS Approach with Atavi. 2nd Trans Atlantic Spine Congress “Innovations in Spine Surgery”. November, 2004; Dallas, Texas/Basel, Switzerland.
175. Guyer RD: SB Charité III Study. 2nd Trans Atlantic Spine Congress “Innovations in Spine Surgery”. November, 2004; Dallas, Texas/Basel, Switzerland.
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179. Guyer RD: Total Posterior Element Replacement. North American Spine Society Spring Break. April, 2005; Bal Harbour, Florida.
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210. Guyer RD: Patient Selection: Patients Aged 45-60. Spine Arthroplasty Summit. February, 2006; Salt Lake City, Utah.
211. Guyer RD: Lumbar Disc Arthroplasty: Past, Present, and Future. John McCulloch Memorial Denver Spine Institute Winter Conference. February, 2006; Denver, Colorado.
212. Guyer RD: Difficult Decision Making in Total Disc Replacement. John McCulloch Memorial Denver Spine Institute Winter Conference. February, 2006; Denver, Colorado.
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214. Guyer RD: Spinal Stenosis: Surgical Decompression. North American Spine Society Spring Break. March, 2006; San Diego, California.
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243. Guyer RD: Lumbar Disc Replacement: Long-term Clinical and Radiological Results. Current Concepts in Emerging Technologies in Spine. February, 2007; Vail, Colorado.
244. Guyer RD: Lumbar Motion vs. Fusion. Current Concepts in Emerging Technologies in Spine. February, 2007; Vail, Colorado.
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264. Guyer RD: Future of Healthcare in the US. Emerging Technologies Spine Education Summit. February, 2008; Jackson Hole, Wyoming.

265. Guyer RD: Charité Data. Current Concepts in Spinal Disorders. February, 2008; Las Vegas, Nevada.
266. Guyer RD: Kineflex. Current Concepts in Spinal Disorders. February, 2008; Las Vegas, Nevada.
267. Guyer RD: TDR Technology is Economically Feasible (Debate). Current Concepts in Spinal Disorders. February, 2008; Las Vegas, Nevada.
268. Guyer RD: Off-label Use of Innovative Medical Technology. Lumbar Spine Research Society. April, 2008; Chicago, Illinois.
269. Guyer RD, McAfee PC, Hochschuler SH, Holt RT, Majd ME, Blumenthal SL, Regan JJ, Geisler FH, Banco RJ, Jenis L, Wong D, Capuccino A, Tromanhauser SG, Bitan F, Stadlan N: Prospective, Randomized, Multicenter Food and Drug Administration Investigational Device Exemption Study of Lumbar Total Disc Replacement with the Charité™ Artificial Disc Versus Lumbar Fusion 5-Year Follow-up. Congress of Neurological Surgeons/American Association of Neurological Surgeons. February, 2008; Orlando, Florida.
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273. Guyer RD: Off-label Use of Innovative Medical Technology. Lumbar Spine Research Society. April, 2008; Chicago, Illinois.
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281. Guyer RD: Total Disc Replacement: One Clinic's Experience with Almost 1,000 Patients in Eight Years (Key Note Lecture). South Africa Cineplex Congress Meeting. July, 2008; Cape Town, South Africa.
282. Guyer RD: Surgical Options for the Degenerative Cascade. Simposio Internacional de Coluna. July, 2008; Rio de Janeiro, Brazil.
283. Guyer RD: New Surgical Options for Spinal Stenosis. Simposio Internacional de Coluna. July, 2008; Rio de Janeiro, Brazil.
284. Guyer RD: Outcomes of Nearly 1000 Total Disc Replacements with 2-8 Year Follow up (Guest Lecture). Simposio Internacional de Coluna. July, 2008; Rio de Janeiro, Brazil.
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299. Guyer RD: Myths of Spine Surgery. Neuroscience Lecture Series. August, 2008; Plano, Texas.
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303. Guyer RD : Eighteen Years of Total Disc Replacement in TBI. First Capital Summit on Orthopaedics. October, 2008; Beijing, China.
304. Guyer RD : Eighteen Years of Total Disc Replacement in TBI. Grand Rounds – Hospital 304 of Peoples' Liberation Army. October, 2008; Beijing, China.
305. Guyer RD: Indications of Semi-rigid Fixation. Brussels International Spine Symposium. November, 2008; Brussels, Belgium.
306. Guyer RD: Overview of Existing Pedicle Based Dynamic Systems. Brussels International Spine Symposium. November, 2008; Brussels, Belgium.
307. Guyer RD: Considerations in Physician-Owned Companies: Divesting or Disclosure? Emerging Technologies Spine Education Summit. February, 2009; Steamboat Springs, Colorado.
308. Guyer RD: Lumbar TDR: Indications - Patient Selection - Contra-Indications. Current Concepts in Spinal Disorders. February, 2009; Las Vegas, Nevada.
309. Guyer RD: Is There A Role for Hybrid Constructs? Current Concepts in Spinal Disorders. February, 2009; Las Vegas, Nevada.
310. Guyer RD: Argument for Lumbar Arthroplasty (Symposium Debate). American Academy of Orthopaedic Surgeons. February, 2009; San Francisco, California.
311. Majd ME, Holt RT, Guyer RD, Banco RJ, Geisler FH, Jenis LG, Regan JJ, Wong DC, Blumenthal SL: Two- and Five-year Lumbar Index-Level Motion Following Arthroplasty: Impact of Heterotopic Ossification. Spine Society of Australia. April, 2009; Brisbane, Australia.
312. Guyer RD, Auer PB, Zigler JE, Ohnmeiss DD, Blumenthal SL: Relationship between Endplate Morphology and Clinical Outcome of Single-Level Lumbar Disc Arthroplasty. Lumbar Spine Research Society. April, 2009; Chicago, Illinois.
313. Guyer RD, Shellock J, MacLennan B, Hanscom D, Knight RQ, McComb P, Jacobs J, Bradford D: Early Failure of Metal-on-Metal Artificial Discs Due to Metal Hypersensitivity: The Diagnostic and Treatment Approach in 4 Collected Cases. Lumbar Spine Research Society. April, 2009; Chicago, Illinois.
314. Guyer RD: Can Society Afford TDR? (Symposium: Challenges and Complications). Spine Arthroplasty Society. April-May, 2009; London, England.

315. Zigler JE, Parkinson A, Guyer RD, Blumenthal SL, Ohnmeiss DD: Re-operations in Lumbar Total Disc Replacement: Experience with Our First Consecutive 800 Cases. *Spine Arthroplasty Society*. April-May, 2009; London, England.
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319. Wong DC, Jenis LG, Guyer RD, Banco RJ, Geisler FH, Holt RT, Majd ME, Regan JJ, Blumenthal SL, DeMuth GE, Hetzell BC: Is Preoperative Disc Height a Contributing Factor in 5-year Success Rate with Arthrodesis and Arthroplasty? *Spine Arthroplasty Society*. April-May, 2009; London, England.
320. Guyer RD, Auer PB, Zigler JE, Ohnmeiss DD, Blumenthal SL: Relationship between Endplate Morphology and Clinical Outcome of Single-Level Lumbar Disc Arthroplasty. *International Society for the Study of the Lumbar Spine*. May, 2009; Miami, Florida.
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331. Guyer RD: The Paradox in Orthopaedics Today - Exciting Technology and Economic Challenges. China International Congress of Orthopaedics. August, 2009; Beijing, China.
332. Guyer RD: Economics of Motion Technology: Surgeon Perspective (Pre-Course: Section on Motion Technology). North American Spine Society (NASS). October, 2009; San Francisco, California.
333. Guyer RD: Muscle Sparing Approaches. Brussels International Spine Symposium. November, 2009; Brussels, Belgium.
334. Guyer RD: The Future of Nucleus Replacement. Brussels International Spine Symposium. November, 2009; Brussels, Belgium.
335. Guyer RD: Arthroplasty: Update and Current Evidence. Evidence and Technology Spine Summit. January, 2010; Steamboat Springs, CO.
336. Guyer RD: Evidence for Facet Replacement. Evidence and Technology Spine Summit. January, 2010; Steamboat Springs, CO.
337. Zigler JE, Blumenthal SL, Guyer RD, Atanasov A, Rodriguez M, Ohnmeiss DD: Comparison of Cervical Disc Replacement and Anterior Cervical Fusion: 24-month Results from Five Prospective Randomized Studies. Asia Pacific Spine Arthroplasty Society. January, 2010; Sanya, China.
338. Zigler JE, Blumenthal SL, Guyer RD, Ohnmeiss DD: Analysis of Re-operations in Lumbar Total Disc Replacement: Experience with 900 Consecutive Cases Including First Case Experience. Asia Pacific Spine Arthroplasty Society. January, 2010; Sanya, China.
339. Guyer RD: Lumbar ADR: Indications – Patient Selections – Contra-Indications. Current Concepts in Spinal Disorders. February, 2010; Las Vegas, Nevada.
340. Guyer RD: Lumbar ADR: Charite. Current Concepts in Spinal Disorders. February, 2010; Las Vegas, Nevada.

341. Guyer RD: Cervical ADR: Kineflex-C. Current Concepts in Spinal Disorders. February, 2010; Las Vegas, Nevada.
342. Blumenthal SL, Guyer RD. Anular Repair after Lumbar Discectomy: Preliminary Observations from an Ongoing, Prospective, Randomized, Controlled Clinical Trial. International Society for the Study of the Lumbar Spine. April, 2010; Auckland, New Zealand.
343. Blumenthal SL, Saqqa S, Guyer RD, Zigler JE, Ohnmeiss DD: Hybrid Combined Total Disc Replacement and Fusion Procedures in the Lumbar Spine: Clinical and Radiographic Outcome. Spine Society of Australia. April, 2010; Christchurch, New Zealand.
344. Guyer RD, Laurysen C, Coric D, Gordon C, Nunley P, Carmody C, Dimmig TA, Taylor W, Buckley R, Donner J, Rhee J, Gerszten PC, Tortolani PJ, Rappaport J, Knight RQ, Dix G, Foley KT, Bitan FD, Bains R, Herkowitz HN: Prospective, Randomized Study Comparing Cervical Total Disc Replacement to Anterior Cervical Fusion: Results from an FDA-Regulated IDE Trial. Spine Arthroplasty Society. April, 2010; New Orleans, Louisiana.
345. Ohnmeiss DD, Hume CS, Guyer RD, Zigler JE, Blumenthal SL: Cost Comparisons of Total Disc Replacement vs. Fusion in Patients with Insurance Denial for Disc Replacement. Spine Arthroplasty Society. April, 2010; New Orleans, Louisiana.
346. Blumenthal SL, Rainey S, Ohnmeiss DD, Zigler JE, Guyer RD: Analysis of Adjacent Segment Re-Operation Following Lumbar Total Disc Replacement. Spine Arthroplasty Society. April, 2010; New Orleans, Louisiana.
347. Zigler JE, Atanasov AM, Ohnmeiss DD, Blumenthal SL, Guyer RD, Hisey MS: A Prospective Randomized Comparison of Cervical Disc Replacement and Anterior Cervical Fusion: Combined Results from Five FDA IDE Trials from a Single Site. Spine Arthroplasty Society. April, 2010; New Orleans, Louisiana.
348. Guyer RD: TDR World Experience: Panel Discussion. (Pre-course: Around the World Experience with Cervical and Lumbar Total Disc Replacement). Spine Arthroplasty Society. April, 2010; New Orleans, Louisiana.
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350. Guyer RD: Innovations in Anular Repair. Innovative Techniques in Spine Surgery. June, 2010; Los Cabos, Mexico.
351. Guyer RD: Lumbar TDR: Adoption challenges. Innovative Techniques in Spine Surgery. June, 2010; Los Cabos, Mexico.
352. Musante D, Guyer RD, Coric D, Gordon C, Nunley PD, Carmody C: Prospective, Randomized, Controlled, Multicenter FDA IDE Trial Comparing Cervical Total Disc Replacement to Anterior Cervical Fusion: 24-Month Follow-Up. International Meeting on Advanced Spine Techniques. July, 2010; Toronto, Canada.

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354. Guyer RD, Pettine KA, Coric D, Nunley PD, Musante D: Direct Comparison of Two Lumbar Total Disc Replacement Devices: Results from a Prospective, Randomized, Multicenter FDA-Regulated Trial. International Meeting on Advanced Spine Techniques. July, 2010; Toronto, Canada.
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356. Guyer RD: Posterior Lumbar Interbody Fusion. International Meeting on Advanced Spine Techniques. July, 2010; Toronto, Canada.
357. Guyer RD: Lumbar TDR: Difficulties with Adoption 10 Years Later in the US. International Meeting on Advanced Spine Techniques. July, 2010; Toronto, Canada.
358. Guyer RD: Current State of Dynamic Stabilization. Simpósio Internacional de Coluna (SINCOL). August, 2010; Rio de Janeiro, Brazil.
359. Guyer RD: MIS Indirect Decompression for Spondylolisthesis. Simpósio Internacional de Coluna (SINCOL). August, 2010; Rio de Janeiro, Brazil.
360. Guyer RD: Is Total Disc Replacement an MIS Alternative to Fusion? Simpósio Internacional de Coluna (SINCOL). August, 2010; Rio de Janeiro, Brazil.
361. Guyer RD: Cervical Total Disc Replacement: TBI Experience. Simpósio Internacional de Coluna (SINCOL). August, 2010; Rio de Janeiro, Brazil.
362. Blumenthal SL, Rainey S, Guyer RD, Zigler JE, Ohnmeiss DD: Analysis of Adjacent Segment Re-Operation Following Lumbar Total Disc Replacement. North American Spine Society. October, 2010; Orlando, Florida.
363. Guyer RD, Shellock J, Kugler C, Hisey MS, Bradley WD, Ohnmeiss DD: Indirect Decompression of Lumbar Spondylolisthesis using Anterior Lumbar Interbody Fusion and Minimally Invasive Pedicle Screw Fixation. North American Spine Society. October, 2010; Orlando, Florida.
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370. Zigler JE, Guyer RD, Blumenthal SL, Ohnmeiss DD: Analysis of Re-Operations after Lumbar Total Disc Replacement: Experience in 1,000 Consecutive Cases Beginning with First Case Experience of 11 Surgeons. North American Spine Society. October, 2010; Orlando, Florida.
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372. Guyer RD: Anterior Interbody Fusion. (Pre-course: Lumbar Interbody Fusion Technologies). North American Spine Society. October, 2010; Orlando, Florida.
373. Guyer RD: Lumbar TDR: Difficulties with Adoption 10 Years Later in the US. (Pre-course: Motion Preservation Technologies). North American Spine Society. October, 2010; Orlando, Florida.
374. Guyer RD: Anular Repair. Instructional Course: State of the Art on the Advances of Research of the Lumbar Spine. October, 2010; Beijing, China.
375. Guyer RD: Difficulty of Adoption of Lumbar TDR in the United States. Instructional Course: State of the Art on the Advances of Research of the Lumbar Spine. October. 2010; Beijing, China.

376. Shellock J, Guyer RD, Hisey MS, Bradley WD, Kugler C, Ohnmeiss DD: Indirect Decompression of Lumbar Spondylolisthesis using anterior lumbar interbody fusion and minimally invasive pedicle screw fixation. Society for Minimally Invasive Spine Surgery. November, 2010; Las Vegas, Nevada.
377. Guyer RD: What is “Dynamic Fusion”? Brussels International Spine Symposium. November, 2010; Brussels, Belgium.
378. Guyer RD, Mayer M: Debate: Is Fusion still the Gold Standard? Brussels International Spine Symposium. November, 2010; Brussels, Belgium.
379. Guyer RD: What have We Learned from the Medicare Coverage Advisory Committee Meeting on Spinal Fusion? Brussels International Spine Symposium. November, 2010; Brussels, Belgium.
380. Guyer RD, Blumenthal SL, Zigler JE, Hisey MS, Atanasov AM, Ohnmeiss DD. A Prospective Randomized Comparison of Cervical Disc Replacement and Anterior Cervical Fusion: Combined Results from Five FDA IDE Trials from a Single Site Cervical Spine Research Society. December, 2010; Charlotte, North Carolina.
381. Guyer RD: Lumbar Surgery - Case Presentations. Current Concepts in Spinal Disorders. February, 2011; Las Vegas, Nevada.
382. Guyer RD: Lumbar TDR: Difficulties with Adoption 11 Years Later in the US. Current Concepts in Spinal Disorders. February, 2011; Las Vegas, Nevada.
383. Guyer RD: Making the Best of the Worst: Lumbar Surgery Cases. Current Concepts in Spinal Disorders. February, 2011; Las Vegas, Nevada.
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385. Zigler JE, Guyer RD, Blumenthal SL, Ohnmeiss DD: Analysis of Re-operations after Lumbar Total Disc Replacement: Experience in 1,000 Consecutive Cases Beginning with First Case Experience of 11 Surgeons. AO Spine Global Spine Congress. March, 2011; Barcelona, Spain.
386. Guyer RD: Role of Disc Height Restoration with DDD. Current Solutions in Spine Surgery. March-April, 2011; Duck Key, Florida.
387. Guyer RD: 5 Year Index Level Motion in LTDR. Current Solutions in Spine Surgery. March-April, 2011; Duck Key, Florida.
388. Guyer RD: Lumbar Disc Disease: Introduction with Case Presentation. Current Solutions in Spine Surgery. March-April, 2011; Duck Key, Florida.
389. Guyer RD: Impact of Pre-Op DEXA Scores in 5 Year Follow Up. Current Solutions in Spine Surgery. March-April, 2011; Duck Key, Florida.

390. Zigler JE, Thongtrangan I, Ohnmeiss DD, Guyer RD, Atanasov A. Health-Related Quality of Life: How Does Symptomatic Disc Degeneration and Its Treatment with Total Disc Replacement Compare to Other Medical Conditions? International Society for the Advancement of Spine Surgery. April, 2011; Las Vegas, Nevada.
391. Araghi A, Blumenthal SL, Guyer RD, Hochschuler SH, Ohnmeiss DD, Shellock J, Messer J. Outcome Associated with Closure of Anular Defects Following Lumbar Discectomy. International Society for the Advancement of Spine Surgery. April, 2011; Las Vegas, Nevada.
392. Duffy MF, Zigler JE, Blumenthal SL, Guyer RD, Saqqa S, Ohnmeiss DD. Treatment Options for Two-Level Symptomatic Disc Degeneration: Comparison of Total Disc Replacement, Fusion, and Hybrid. International Society for the Advancement of Spine Surgery. April, 2011; Las Vegas, Nevada.
393. Zigler JE, Samocha Y, Guyer RD, Blumenthal SL, Ohnmeiss DD. Cervical Total Disc Replacement vs. Anterior Cervical Fusion: Data from Four Prospective, Randomized, Multicenter Trials. International Society for the Advancement of Spine Surgery. April, 2011; Las Vegas, Nevada.
394. Coric D, Nunley PD, Guyer RD, Dimming T, Carmody C, Gordon C, Laurysen C. Analysis of Adjacent Segment Degeneration: Results of a Prospective, Randomized Study Comparing Cervical Total Disc Replacement vs. Anterior Cervical Fusion. International Society for the Advancement of Spine Surgery. April, 2011; Las Vegas, Nevada.
395. Guyer RD: Making the Best of the Worst: Lumbar Surgery Cases. International Society for the Advancement of Spine Surgery. April, 2011; Las Vegas, Nevada.
396. Guyer RD: DDD with Low Back Pain. Surgery is a Valuable Treatment. Innovative Techniques in Spine Surgery: "Think Tank 2011." June, 2011; Los Cabos, Mexico.
397. Guyer RD: Lumbar TDR: Is there a future? Innovative Techniques in Spine Surgery: "Think Tank 2011." June, 2011; Los Cabos, Mexico.
398. Guyer RD: Posterior Lumbar Fusion – Indications and Outcomes. International Meeting on Advanced Spine Techniques. July, 2011; Copenhagen, Denmark.
399. Guyer RD: Lumbar Disc Replacement – Long-term Follow-up. International Meeting on Advanced Spine Technologies. July, 2011; Copenhagen, Denmark.
400. Guyer RD: Lumbar Artificial Disc Surgery for Chronic Low Back Pain: Indications and Techniques. Annual Temple Spine Symposium: Low Back Pain. September, 2011: Philadelphia, Pennsylvania.
401. Guyer RD: Mini Invasive and Indirect Decompression for Spondylolisthesis. Brussels International Spine Symposium. November, 2011; Brussels, Belgium.
402. Guyer RD: Perc Screws and Radiation. To patient and surgeon. Brussels International Spine Symposium. November, 2011; Brussels, Belgium.
403. Ohnmeiss DD, Blumenthal SL, Guyer RD: Investigating the Potential Effect of "Euphoric Bias" for the New Technology on Results of Randomized Lumbar Total Disc Replacement Trials. North American Spine Society. November, 2011; Chicago, Illinois.

404. Thongtrangan I, Ohnmeiss DD, Zigler JE, Guyer RD, Atanasov AM: Health-Related Quality of Life: How Does Symptomatic Disc Degeneration and Its Treatment with Total Disc Replacement Compare to Other Medical Conditions? North American Spine Society. November, 2011; Chicago, Illinois.
405. Zigler JE, Guyer RD, Blumenthal SL, Hisey MS, Atanasov AM, Ohnmeiss DD: Total Disc Replacement vs. Anterior Cervical Fusion: Minimum 24-Month Follow-Up Data Combined from Six FDA IDE Trials at a Single Site. Cervical Spine Research Society. December, 2011; Scottsdale, Arizona.
406. Guyer RD: What to Expect from a Fellowship. Transitions in Spine Surgery: Residency to Fellowship, Fellowship to Practice. January, 2012; Plano, Texas.
407. Guyer RD: Advocacy: Getting Involved to Shape Your Own Future. Transitions in Spine Surgery: Residency to Fellowship, Fellowship to Practice. January, 2012; Plano, Texas.
408. Guyer RD: Motion Preserving Technologies: Lumbar. Transitions in Spine Surgery: Residency to Fellowship, Fellowship to Practice. January, 2012; Plano, Texas.
409. Guyer RD: Radiation Exposure in the OR: Start Early to Protect Yourself. Transitions in Spine Surgery: Residency to Fellowship, Fellowship to Practice. January, 2012; Plano, Texas.
410. Guyer RD: Inside an FDA Clinical Trial. Texas Health Center for Diagnostics and Surgery. January, 2012; Plano, Texas.
411. Guyer RD: Incorporating Research into Private Practice. Spine Fellows Course. January, 2012; Vail, Colorado.
412. Guyer RD: Myths of Spine Surgery. Spine Fellows Course. January, 2012; Vail, Colorado.
413. Guyer RD: The Future of Artificial Disc Replacement. Current Concepts in Spinal Disorders. February, 2012; Las Vegas, Nevada.
414. Guyer RD: Evidence for Lumbar Arthroplasty. American Academy of Orthopaedic Surgeons. February, 2012; San Francisco, California.
415. Blumenthal SL, Guyer RD, Ohnmeiss DD, Zigler JE: Comparison of Re-operations in Cervical Total Disc Replacement vs. Anterior Cervical Fusion: Results with Mean 48 Month Follow-up. International Society for the Advancement of Spine Surgery. March, 2012; Barcelona, Spain.
416. Morrison T, Guyer RD, Hisey MH, Atanasov A, Ohnmeiss DD, Zigler JE, Blumenthal SL: Clinical Outcome of Stand-alone Anterior Lumbar Interbody Fusion. International Society for the Advancement of Spine Surgery. March, 2012; Barcelona, Spain.
417. Guyer RD, Ohnmeiss DD, Zigler JE, Blumenthal SL, Shivers J: Implementation of a Quality Assurance Program for Spine Surgery in a Multi-site Private Practice. International Society for the Advancement of Spine Surgery. March, 2012; Barcelona, Spain.
418. Guyer RD, Blumenthal SL, Hisey MS, Bradley WD, Ohnmeiss DD: Indirect Decompression of Lumbar Spondylolisthesis Using Anterior Lumbar Interbody Fusion and

- Minimally Invasive Pedicle Screw Fixation. Spine Society of Australia. April, 2012; Sydney, Australia.
419. Blumenthal SL, Ohnmeiss DD, Guyer RD, Zigler JE: Comparison of Re-operations in Cervical Total Disc Replacement vs. Anterior Cervical Fusion: Results with Mean 48 Month Follow-up. Spine Society of Australia. April, 2012; Sydney, Australia.
 420. Guyer RD: Mini-Invasive 360 and Indirect Decompression for Spondylolisthesis. China International Conference on Lumbar Spine Surgery and International Society for the Study of the Lumbar Spine (Instructional Course). June, 2012; Beijing, China.
 421. Guyer RD: Implementing a Quality Assurance Program for your Practice. "State of Spine Surgery: A Think Tank". June, 2012; Carlsbad, California.
 422. Guyer RD: Lumbar TDR: Is There Any Future? "State of Spine Surgery: A Think Tank". June, 2012; Carlsbad, California.
 423. Guyer RD: Kineflex|C. "State of Spine Surgery: A Think Tank". June, 2012; Carlsbad, California.
 424. Duffy MF, Ohnmeiss DD, Belanger TA, Guyer RD, Blumenthal SL, Zigler JE: _ Impact of Cervical Symptoms on Ability to Participate in Recreational Activities. State of Spine Surgery: A Think Tank". June, 2012; Carlsbad, California.
 425. Duffy MF, Guyer RD, Zigler JE, Blumenthal SL, Saqqa S, Ohnmeiss DD: Treatment Options for Two-Level Symptomatic Disc Degeneration: Comparison of Total Disc Replacement, Fusion, and Hybrid. SpineWeek - North American Spine Society Section. May, 2012; Amsterdam, The Netherlands.
 426. Block AR, Ohnmeiss DD, Guyer RD, Atanasov A, Ben-Porath Y, Burchett D: Presurgical Psychological Screening: A New Algorithm, Including the MMPI-2-RF, for Predicting Spine Surgery Results. SpineWeek - International Society for the Study of the Lumbar Spine Section. May, 2012; Amsterdam, The Netherlands.
 427. Bradley WD, Edwards K, Hisey MS, Guyer RD, Zigler JE, Ohnmeiss DD: Extreme Lateral Interbody Fusion (XLIF): Clinical Results from One Center. Spine Across the Sea. July - August, 2012; Kauai, Hawaii.
 428. Morrison T, Guyer RD, Atanasov A, Ohnmeiss DD, Zigler JE, Blumenthal SL: Clinical Outcome of Stand-Alone Anterior Lumbar Interbody Fusion. Spine Across the Sea. July - August, 2012; Kauai, Hawaii.
 429. Ohnmeiss DD, Duffy MF, Belanger TA, Guyer RD, Blumenthal SL, Zigler JE: Impact of Cervical Symptoms on Ability to Participate in Recreational Activities. Spine Across the Sea. July - August, 2012; Kauai, Hawaii.
 430. Block AR, Belanger TA, Ben-Porath Y, Atanasov A, Ohnmeiss DD: Workers' Compensation versus Non Workers' Compensation: Differences in Personality. Spine Across the Sea. July - August, 2012; Kauai, Hawaii.
 431. Blumenthal SL, Guyer RD, Ohnmeiss DD, Zigler JE: Comparison of Re-operations in Cervical Total Disc Replacement vs. Anterior Cervical Fusion: Results with Mean 48 Month Follow-up. Spine Across the Sea. July - August, 2012; Kauai, Hawaii.

432. Guyer RD: Lumbar Total Disc Replacement: Update on Comparative FDA Studies. Total Disc 2012. September, 2012; Zurich, Switzerland.
433. Guyer RD: Lumbar Total Disc Replacement: Problems of Adoption in the USA. Total Disc 2012. September, 2012; Zurich, Switzerland.
434. Guyer RD: Cost of Total Disc Replacement and Fusion. Total Disc 2012. September, 2012; Zurich, Switzerland.
435. Guyer RD: Cervical Total Disc Replacement: Update on Comparative FDA Studies. Total Disc 2012. September, 2012; Zurich, Switzerland.
436. Block AR, Atanasov A, Ohnmeiss DD, Guyer RD, Burchett D: Workers' Compensation Versus Non Workers' Compensation Patients: Are There Personality Differences? North American Spine Society. October, 2012; Dallas, Texas.
437. Ohnmeiss DD, Guyer RD, Blumenthal SL, Zigler JE: Impact of Cervical Symptoms on Ability to Participate in Recreational Activities. North American Spine Society. October, 2012; Dallas, Texas.
438. Guyer RD: Stand-alone ALIF is a Good Solution for Single-Level Disease of the Lumbar Spine– Pro (Debate – part of Current Controversies in Spine Care and Surgery Symposium). North American Spine Society. October, 2012; Dallas, Texas.
439. Blumenthal SL, Ohnmeiss DD, Guyer RD, Zigler JE: Comparison of Re-Operations in Cervical Total Disc Replacement vs. Anterior Cervical Fusion. North American Spine Society. October, 2012; Dallas, Texas.
440. Guyer RD: Update on Lumbar TDR: The Future. (part of Lumbar Disc Replacement Symposium). North American Spine Society. October, 2012; Dallas, Texas.
441. Guyer RD: Incorporating Research into Private Practice. Spine Fellows Course. January, 2013; Vail, Colorado.
442. Guyer RD: Myths of Spine Surgery - Doctor-Patient Relationships-Decision Making. Spine Fellows Course. January, 2013; Vail, Colorado.
443. Guyer RD: Controversy of Metal on Metal Disc Replacements. Symposium on Spinal Disorders. January-February, 2013; Las Vegas, Nevada.
444. Guyer RD: Keynote: Future Innovations in Spine: Opportunities and Challenges. Symposium on Spinal Disorders. January-February, 2013; Las Vegas, Nevada.
445. Guyer RD: Inside an FDA Clinical Trial. Texas Health Center for Diagnostics and Surgery. January, 2012; Plano, Texas.
446. Blumenthal SL, Ohnmeiss DD, Guyer RD, Zigler JE: Re-operations in Cervical Total Disc Replacement vs. Anterior Cervical Fusion: Mean 48 Month Follow-up. American Academy of Orthopaedic Surgeons. March, 2013; Chicago, Illinois.
447. Guyer RD, Pettine K, Dimmig T, Coric D, Cappuccino A, Roh J: Five-year Follow-up of a Prospective, Randomized FDA IDE Trial Comparing Two Lumbar Total Disc Replacements: Clinical Outcome and Serum Ion Level Analysis for a Metal-on-Metal

- Device. International Society for the Advancement of Spine Surgery. April, 2013; Vancouver, Canada.
448. Blumenthal SL, Zigler JE, Guyer RD, Ohnmeiss DD: Long-term Evaluation of Re-operation Rates for Lumbar Total Disc Replacement and Fusion: Analysis of 1,237 Patients. International Society for the Advancement of Spine Surgery. April, 2013; Vancouver, Canada.
 449. Block A, Ben-Porath Y, Marek R, Ohnmeiss DD, Guyer RD: Relationship of Workers Compensation Status, Psychological Profiles, and Clinical Outcome: Results of a Prospective, Multicenter Study. International Society for the Advancement of Spine Surgery. April, 2013; Vancouver, Canada.
 450. Guyer RD, Shivers J, Ohnmeiss DD, Zigler JE: Implementation and Impact of Pre-operative Peer Case Review in a Spine Practice. International Society for the Advancement of Spine Surgery. April, 2013; Vancouver, Canada.
 451. Guyer RD: Defining Value in Medicine - Why it Matters (part of symposium: Value in Spine Care: How Do We Show How Good We Are?). International Society for the Advancement of Spine Surgery. April, 2013; Vancouver, Canada.
 452. Guyer RD: Stand Alone Anterior Interbody Fusion. China International Conference on Lumbar Spine. May, 2013; Xi'an, China.
 453. Guyer RD: Peer Review and Quality Assurance for Spine Surgery. China International Conference on Lumbar Spine May, 2013; Xi'an, China.
 454. Guyer RD: Lumbar Total Disc Replacement Long Term Outcomes. China International Conference on Lumbar Spine. May, 2013; Xi'an, China.
 455. Blumenthal SL, Zigler JE, Guyer RD, Ohnmeiss DD: Long-term Evaluation of Re-operation Rates for Lumbar Total Disc Replacement and Fusion: Analysis of 1,237 International Society for the Study of the Lumbar Spine. May, 2013; Scottsdale, Arizona.
 456. Guyer RD, Pettine K, Dimmig T, Coric D, Cappuccino A, Roh J: Five-year Follow-up of a Prospective, Randomized FDA IDE Trial Comparing Two Lumbar Total Disc Replacements: Clinical Outcome and Serum Ion Level Analysis for a Metal-on-Metal. International Society for the Study of the Lumbar Spine. May, 2013; Scottsdale, Arizona.
 457. Block A, Ben-Porath Y, Marek R, Ohnmeiss DD, Guyer RD: Relationship of Workers Compensation Status, Psychological Profiles, and Clinical Outcome: Results of a Prospective, Multicenter Study. International Society for the Study of the Lumbar Spine. May, 2013; Scottsdale, Arizona.
 458. Guyer RD: Lumbar TDR: Is It Alive? State of Spine Surgery: "Think Tank." June, 2013; Los Cabos, Mexico.
 459. Shellock J, Guyer RD, Shivers J, Ohnmeiss DD, Zigler JE: Implementation and Impact of a Pre-operative Peer Case Review Process in a Spine Practice. State of Spine Surgery: "Think Tank." June, 2013; Los Cabos, Mexico
 460. Guyer RD: Current Indications and Clinical Results of Lumbar TDR vs. Lumbar Fusion. North American Spine Society – Summer Spine Meeting. August, 2013; Naples, Florida.

461. Guyer RD, Pettine K, Dimmig T, Coric D, Cappuccino A, Roh J: Five-year Follow-up of a Prospective, Randomized FDA IDE Trial Comparing Two Lumbar Total Disc Replacements: Clinical Outcome and Serum Ion Level Analysis for a Metal-on-Metal. North American Spine Society. October, 2013; New Orleans, Louisiana.
462. Blumenthal SL, Zigler JE, Guyer RD, Ohnmeiss DD: Long-term Evaluation of Re-operation Rates for Lumbar Total Disc Replacement and Fusion: Analysis of 1,237 Patients. North American Spine Society. October, 2013; New Orleans, Louisiana.
463. Guyer RD: Monitoring Quality of Surgical Care in Your Clinic. Data Collection, Value and Cost-Effectiveness of Spine Care (Symposium). North American Spine Society. October, 2013; New Orleans, Louisiana.
464. Guyer RD: How Computers Have Changed the Practice of Medicine Over the Last 20 Years. Brussels International Spine Symposium. November, 2013; Brussels, Belgium.
465. Guyer RD: Newer Techniques of Diagnosis and Surgery Have Led to Better Patient Outcomes Over the Last 20 Years, True or False? Brussels International Spine Symposium. November, 2013; Brussels, Belgium.
466. Guyer RD: Is Lumbar Arthroplasty Dead in the USA or Will There Be a Renaissance? Symposium on Current Concepts in Spinal Disorders. January-February, 2014; Las Vegas, Nevada.
467. Guyer RD: Strategies Ensuring Uniform Quality of Care among Spine Surgeons without Stifling Creativity. Spine Summit. February, 2014; Dallas, Texas.
468. Guyer RD: Cervical TDR: US Experience. International Symposium for Cervical and Lumbar Arthroplasty. March, 2014; Barcelona, Spain.
469. Guyer RD: Revision of Cervical Disc Arthroplasty from 6 FDA IDE Studies at One Center. International Symposium for Cervical and Lumbar Arthroplasty. March, 2014; Barcelona, Spain.
470. Guyer RD: Clinical Outcomes and Cost Effectiveness of Lumbar TDR. International Symposium for Cervical and Lumbar Arthroplasty. March, 2014; Barcelona, Spain.
471. Guyer RD: Percutaneous Screws and Radiation: To Patient and Surgeon. International Society for the Study of the Lumbar Spine Instructional Course. March, 2014; Santiago, Chile.
472. Guyer RD: Motion Preservation Surgery: Is It Worthy? International Society for the Study of the Lumbar Spine Instructional Course. March, 2014; Santiago, Chile.
473. Guyer RD: Is There Still a Place for BMP? International Society for the Study of the Lumbar Spine Instructional Course. March, 2014; Santiago, Chile.
474. Guyer RD: Debate: Fusion for Low Back Pain? (Yes) International Society for the Study of the Lumbar Spine Instructional Course. March, 2014; Santiago, Chile.
475. Guyer RD: Stand-alone ACDF vs. Plate and Screw Constructs. Current Solutions in Spine Surgery. April, 2014; Duck Key, Florida.

476. Guyer RD: Lumbar Total Disc Replacement: Alive and Well. Current Solutions in Spine Surgery. April, 2014; Duck Key, Florida.
477. Ohnmeiss DD, Guyer RD, Blumenthal SL, Zigler JE; The Re-operation Rate in a Single Dataset Varies Significantly Depending on the Definitions Applied. International Society for the Advancement of Spine Surgery. April-May, 2014; Miami, Florida.
478. Guyer RD: TDR in North America. Symposium: Cervical Arthroplasty: Is It Now the Gold Standard for Herniated Disc? International Society for the Advancement of Spine Surgery. April-May, 2014; Miami, Florida.
479. Coric D, Guyer RD, Nunley P, Musante D, Boltes MO: Kineflex|C Cervical Arthroplasty: Long-term Clinical and Radiographic Outcomes from a Prospective, Randomized IDE Study. International Society for the Advancement of Spine Surgery. April-May, 2014; Miami, Florida.
480. Ohnmeiss DD, Guyer RD, Blumenthal SL, Zigler JE; The Re-operation Rate in a Single Dataset Varies Significantly Depending on the Definitions Applied. International Society for the Advancement of Spine Surgery. April-May, 2014; Miami, Florida.
481. Biehn J, Shellock J, Ohnmeiss DD, Guyer RD, Zigler JE: Use of Amniotic Membrane Anti-adhesion Barrier for Lumbar Discectomy. International Society for the Advancement of Spine Surgery. April-May, 2014; Miami, Florida.
482. Guyer RD: Status of Disc Arthroplasty. International Society for the Study of the Lumbar Spine. June, 2014; Seoul, Korea.
483. Ohnmeiss DD, Baker R, Guyer RD, Blumenthal SL, Zigler JE; The Re-operation Rate in a Single Dataset Varies Significantly Depending on the Definitions Applied. International Society for the Study of the Lumbar Spine. June, 2014; Seoul, Korea.
484. Guyer RD: Can New Technologies Be Cost Saving? Disc Replacement. *State of Spine Surgery: A Think Tank*. June, 2014; Los Cabos, Mexico.
485. Guyer RD: The CPT Process. What Data Do We Need for Reimbursement? *State of Spine Surgery: A Think Tank*. June, 2014; Los Cabos, Mexico.
486. Guyer RD: Using Advanced Imaging to Increase Surgical Approvals. *State of Spine Surgery: A Think Tank*. June, 2014; Los Cabos, Mexico.
487. Guyer RD: Myths of Spine Surgery. August, 2014; Plano, Texas.
488. Guyer RD: Surgical Approaches in the Elderly. Brussels International Spine Symposium. November, 2014; Brussels, Belgium.
489. Guyer RD: Stenosis in the Elderly: to Fuse or Not. Brussels International Spine Symposium. November, 2014; Brussels, Belgium.
490. Guyer RD: Is There an Age Limit to Surgery? Brussels International Spine Symposium. November, 2014; Brussels, Belgium.
491. Guyer RD: The Truth: From Charite to Now – This is Not Another Marketing Talk! Current Concepts in Spinal Disorders. January, 2015; Las Vegas, Nevada.

492. Guyer RD, Otero-Lopez E, Blumenthal SL, Ohnmeiss DD, Zigler JE: Comparison of Clinical Outcomes for Anterior vs. 360 Fusion at the Fusion Level of Lumbar Hybrid Surgery. Spine Society of Australia. April, 2015; Canberra, Australia.
493. Guyer RD, Blumenthal SL, Ohnmeiss DD, Zigler JE: Long-Term Evaluation of Re-Operation Rates for Lumbar Total Disc Replacement and Fusion: Analysis of 1,279 Patients. Spine Society of Australia. April, 2015; Canberra, Australia.
494. Hipp JA, Guyer RD, Zigler JE, Ohnmeiss DD, Wharton N: A New Method Correlating an Objective Radiographic Metric for Lumbar Spine Stability and the Facet Fluid Sign on MRI. International Society for the Advancement of Spine Surgery. April, 2015; San Diego, California.
495. Guyer RD, Putney E, Carl A, Tepper G, Ohnmeiss DD: When Would a Spine Surgeon Have Surgery for a Herniated Disc? International Society for the Advancement of Spine Surgery. April, 2015; San Diego, California.
496. Hipp JA, Zigler JE, Guyer RD, Ohnmeiss DD, Wharton N: Developing Normative Values for a Quantifiable, Clinically Applicable Method to Evaluate Lumbar Instability. International Society for the Advancement of Spine Surgery. April, 2015; San Diego, California.
497. Guyer RD: Cervical Disc Arthroplasty, is it the New Gold Standard? Brazilian Spine Society. April, 2015; Belo Horizonte, Brazil.
498. Guyer RD: Surgical Approaches to Treat Spinal Stenosis. Brazilian Spine Society (North American Spine Society section). April, 2015; Belo Horizonte, Brazil.
499. Owusu A, Zigler JE, Ohnmeiss DD, Guyer RD, Blumenthal SL: Pregnancy after Lumbar Total Disc Replacement. Global Spine Congress. May, 2015; Buenos Aires, Argentina. Global Spine Congress. May, 2015; Buenos Aires, Argentina.
500. Happ C, Guyer RD, Zigler JE, Blumenthal SL, Ohnmeiss DD: Stand-alone Interbody Devices in the Treatment of Cervical Spine Disease. Global Spine Congress. May, 2015; Buenos Aires, Argentina.
501. Guyer RD, Otero-Lopez E, Zigler JE, Ohnmeiss DD, Blumenthal SL Comparison of Clinical Outcomes for Anterior vs. 360 Fusion at the Fusion Level of Lumbar Hybrid Surgery. Global Spine Congress. May, 2015; Buenos Aires, Argentina.
502. Guyer RD, Putney E, Carl A, Tepper G, Ohnmeiss DD: When Would a Spine Surgeon Have Surgery for a Herniated Disc? Global Spine Congress. May, 2015; Buenos Aires, Argentina.
503. Guyer RD: Coflex: A Minimally Invasive Motion Sparing Technique for the Treatment of Spinal Stenosis. Chinese Orthopaedic Association. May, 2015; Beijing, China.
504. Guyer RD: TDR: An Economic Advantage? State of Spine Surgery: A Think Tank. June, 2015; Los Cabos, Mexico.
505. Guyer RD: How Do Economics Drive Clinical Decision-making? State of Spine Surgery: A Think Tank. June, 2015; Los Cabos, Mexico.

506. Ohnmeiss, DD, Guyer RD, Blumenthal SL, Zigler JE: The Re-operation Rate in a Single Dataset Varies Significant Depending on the Definitions Applied. Spine Across the Sea. July, 2015; Big Island, Kohala Coast, Hawaii.
507. Rogers RW, Blumenthal SL, Guyer RD, Zigler JE, Ohnmeiss DD: Clinical Outcomes following Anterior Cervical Hybrid Surgery Using Total Disc Replacement Combined with Anterior Cervical Fusion at the Adjacent Segment. Spine Across the Sea. July, 2015; Big Island, Kohala Coast, Hawaii.
508. Otero-Lopez ER, Blumenthal SL, Ohnmeiss, Guyer RD, Zigler JE: Comparison of Clinical Outcomes for Anterior vs. 360 Fusion at the Fusion Level of Lumbar Hybrid (Total Disc Replacement / Fusion) Surgery. Spine Across the Sea. July, 2015; Big Island, Kohala Coast, Hawaii.
509. Hu X, Ohnmeiss DD, Zigler JE, Guyer RD, Lieberman IH: Restoration of Cervical Alignment is Associated with Improved Clinical Outcome after One and Two Level Anterior Cervical Discectomy and Fusion. North American Spine Society. October, 2015; Chicago, Illinois.
510. Guyer RD: Lumbar TDR: Where Are We Now? (Part of precourse: The Evolution of Total Disc Replacement and Future Directions). North American Spine Society. October, 2015; Chicago, Illinois.
511. Guyer RD: To Integrate or Not to Integrate, That Is the Question. (Part of symposium: Interbody Fusion Options: So Many Designs, So Many Materials... How Do You Choose the Best Option for Your Patient?). North American Spine Society. October, 2015; Chicago, Illinois.
512. Hu X, Ohnmeiss DD, Zigler JE, Guyer RD, Lieberman IH: Restoration of Cervical Alignment is Associated with Improved Clinical Outcome after One- and Two-Level Anterior Cervical Discectomy and Fusion. North American Spine Society. October, 2015; Chicago, Illinois.
513. Guyer RD: New Technology for Decompression of the Lumbar Spine Inside Out. Brussels International Spine Symposium. November, 2015; Brussels, Belgium.
514. Guyer RD: 3D Printing for Spinal Implants. Brussels International Spine Symposium. November, 2015; Brussels, Belgium.
515. Guyer R: ALIF with MIS Pedicle Screws. Current Concepts in Spinal Disorders. January, 2016; Las Vegas, Nevada.
516. Guyer R: Is Lumbar Artificial Disc Really Worth the Expense? Current Concepts in Spinal Disorders. January, 2016; Las Vegas, Nevada.
517. Hisey M, Zigler J, Guyer R, Ohnmeiss D: Impact of Age on Patient Outcomes after Cervical Disc Arthroplasty or Anterior Cervical Discectomy and Fusion: Comparison at 5-Year Follow-up. International Society for the Advancement of Spine Surgery. April, 2016; Las Vegas, Nevada.
518. Zigler J, Shivers J, Guyer R, Ohnmeiss D: Complications Associated with the Anterior Approach to the Lumbar Spine: Analysis of 2,881 Consecutive Cases during a 6-year

- Period. International Society for the Advancement of Spine Surgery. April, 2016; Las Vegas, Nevada.
519. Guyer R, Putney E, Ohnmeiss D, Zigler J: Analysis of Hospital Length of Stay Following Lumbar Anterior/Posterior Combined Fusion: Is There a Disadvantage Associated with Shorter Stays? International Society for the Advancement of Spine Surgery. April, 2016; Las Vegas, Nevada.
 520. Guyer RD: Coflex- Incremental Value. (Part of Symposium: New Technologies - Hype or Incremental Value?). International Society for the Advancement of Spine Surgery. April, 2016; Las Vegas, Nevada.
 521. Putney E, Blumenthal SL, Guyer RD, Zigler JE, Ohnmeiss DD: Analysis of Hospital Length of Stay Following Lumbar Anterior/Posterior Combined Fusion: Is There a Disadvantage Associated with Shorter Stays? Spine Society of Australia. April, 2016; Melbourne, Australia.
 522. Blumenthal SL, Zigler JE, Shivers J, Ohnmeiss DD, Guyer RD: Complications Associated with the Anterior Approach to the Lumbar Spine: Analysis of 2,881 Consecutive Cases during a 6-Year Period. Spine Society of Australia. April, 2016; Melbourne, Australia.
 523. Blumenthal SL, Guyer RD, Zigler JE, Ohnmeiss DD: Stand-Alone Interbody Devices in the Treatment of Cervical Spine Disease. Spine Society of Australia. April, 2016; Melbourne, Australia.
 524. Guyer RD: Impact of Weight-Bearing MRI for Spine Surgery and Spine Surgeons: Preliminary Results in Lumbar Spondylolisthesis. Weight-bearing MRI Summit. May, 2016; Rome, Italy.
 525. Guyer RD, Abitbol JJ, Ohnmeiss DD, Yao C: Evaluating the osseointegration of a Deeply Porous Titanium Scaffold through Comparison with PEEK Implants and Allograft: Biomechanical Assessment Using a Porcine Skull Model. North American Spine Society – SpineWeek. May, 2016; Singapore.
 526. Hisey M, Zigler J, Guyer R, Ohnmeiss D: Impact of Age on Patient Outcomes after Cervical Disc Arthroplasty or Anterior Cervical Discectomy and Fusion: Comparison at 5-year Follow-up. International Society for the Advancement of Spine Surgery – SpineWeek. May, 2016; Singapore.
 527. Guyer R: Blast from the Past: Is There a Future for Lumbar TDR? State of Spine Surgery: A Think Tank. June, 2016; Los Cabos, Mexico.
 528. Guyer R: ECM Technology with Allograft Tissue Enhancement. State of Spine Surgery: A Think Tank. June, 2016; Los Cabos, Mexico.
 529. Guyer R: Management of Progressive Degenerative Lumbar Spinal Stenosis- An Evidence Based Approach, Past and Present. State of Spine Surgery A Think Tank. June, 2016; Los Cabos, Mexico.
 530. Guyer R: M6 Overview. State of Spine Surgery A Think Tank. June, 2016; Los Cabos, Mexico.

531. Guyer RD: The Evidence-based Use of Medications in Spine Management. Spine 10 x 25 Summit: Technology Update. July, 2016; Chicago, Illinois.
532. Guyer RD: Update on Lumbar Motion Preserving Technologies. China International Conference on Lumbar Spine Surgery. July, 2016; Jilin, China
533. Guyer RD: Lumbar Total Disc Replacement and Adjacent Segment Degeneration. China International Conference on Lumbar Spine Surgery. July, 2016; Jilin, China.
534. Guyer RD: Future Designs and Materials for Cervical Disc Replacement. International Symposium for Cervical and Lumbar Arthroplasty. October, 2016; Berlin, Germany.
535. Ohnmeiss DD, Guyer RD, Blumenthal SL, Zigler JE: Re-operation Rates in Lumbar Spine Surgery: Statistically Significant Differences Exist in the Same Dataset When Different Definitions for Re-operation Are Applied. North American Spine Society. October, 2016; Boston, Massachusetts.
536. Guyer RD: 2-level Total Disc Replacement. Section on Spine Motion Technology: Debating Options for Treating Painful Lumbar Disc Degeneration and Lumbar Stenosis. North American Spine Society. October, 2016; Boston, Massachusetts.
537. Guyer RD: Is There Value in Lumbar Disc Replacement in the Treatment of Degenerative Disc Disease? Symposium: Low Back Pain Secondary to Degenerative Disc Disease: Interdisciplinary Perspectives on the Value of Treatment. North American Spine Society. October, 2016; Boston, Massachusetts.
538. Zigler JE, Putney E, Ohnmeiss DD, Guyer RD, Blumenthal SL: Anterior Access to the Lumbar Spine: Complications Encountered in 2,881 Consecutive Procedures. North American Spine Society. October, 2016; Boston, Massachusetts.
539. Guyer RD, Ohnmeiss DD, Yao C: Comparison of Abrasion and Osseointegration Associated with Titanium Plasma Spray Coated PEEK vs. FortiCore Deeply Porous Titanium Scaffold on PEEK. (Innovative Technology Exhibitors Symposium). North American Spine Society. October, 2016; Boston, Massachusetts
540. Guyer RD: Will We Surgeons Be Reduced to Pilots Navigating Our Surgery While the Computers Do the Work? Brussels International Spine Symposium. November, 2016; Brussels, Belgium.
541. Guyer RD: Cost Effectiveness of Major Reconstructive Surgery in the Elderly. Brussels International Spine Symposium. November, 2016; Brussels, Belgium.
542. Guyer RD: Bioactive Interbody Implants or Abrasion and Osseointegration Associated with Titanium Plasma Spray-Coated PEEK vs. Deeply Porous Titanium Scaffold on PEEK. Current Concepts in Spinal Disorders. February, 2017; Las Vegas, Nevada.
543. Guyer R: Does Lumbar ADR Have Any Role in Spinal Deformity? Current Concepts in Spinal Disorders. February, 2017; Las Vegas, Nevada.
544. Guyer R: New Technologies: Hype or Value? Inter-spinous /laminar Devices for Lumbar Stenosis. Federation of Spine Associations at the American Academy of Orthopaedic Surgeons. March, 2017; San Diego, California.

545. Guyer RD, Abitbol JJ, Chang Y, Ohnmeiss DD: Comparison of Abrasion and Osseointegration Associated with Titanium Plasma Spray Coated PEEK vs. a Deeply Porous Titanium Scaffold on PEEK. International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
546. Phillips F, Sasso R, Coric D, Guyer R, Sama A, Cammisa F, Blumenthal S, Albert T, Zigler J: Clinical and Radiographic Outcomes for the M6-C Artificial Cervical Disc: 1 Year Follow-up at Five IDE Investigation Centers for a Novel Design Six Degree of Freedom Prosthesis. International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
547. Guyer R, Zigler J, Ohnmeiss D: Ten-year Follow-up of Patients Enrolled in the FDA-regulated Trial for Single-level Lumbar Total Disc Replacement: One Site's Experience. International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
548. Guyer R, Zigler J, Ohnmeiss DD: Clinical Outcome of Two-level Lumbar Total Disc Replacement: An Analysis of 141 Patients with Minimum 24-month Follow-up. International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
549. Guyer RD: MIS and Adoption of DReal in the US. Israel Spine Society. April, 2017; Eliat, Israel.
550. Guyer RD: US Update on Cervical Arthroplasty 2017. Israel Spine Society. April, 2017; Eliat, Israel.
551. Guyer RD: Update on Lumbar Total Disc Replacement. Israel Spine Society. April, 2017; Eliat, Israel.
552. Guyer RD: How Much Kyphosis is Allowable for Cervical Total Disc Replacement. Castellvi Spine. May, 2017; Duck Key, Florida.
553. Guyer RD: State of Total Disc Replacement; Past, Present and Future. Castellvi Spine. May, 2017; Duck Key, Florida.
554. Blumenthal SL, Guyer RD, Ohnmeiss DD, Zigler JE: Adjacent Segment Degeneration after Lumbar Total Disc Replacement: 5-Year Results of a Multicenter, Prospective, Randomized Study with Independent Radiographic Assessment. International Society for the Study of the Lumbar Spine. May-June, 2017; Athens, Greece.
555. Guyer RD: When Do I Use Them: Why, and What's the Evidence? Mini-ALIF. State of Spine Surgery Think Tank. June, 2017; Los Cabos, Mexico.
556. Guyer RD: The Changing Landscape of ASCs: Cash Cow or Troubled Venture for Surgeons? State of Spine Surgery Think Tank. June, 2017; Los Cabos, Mexico.
557. Guyer RD: Stand Alone ALIF for Spondy. Brussels International Spine Symposium. November, 2017; Brussels, Belgium.
558. Guyer RD: Indirect Decompression for Spondy. Brussels International Spine Symposium. November, 2017; Brussels, Belgium.

559. Guyer R: Posterior Facet Replacement. Symposium on Current Concepts in Spinal Disorders. February, 2018; Las Vegas, Nevada.
560. Guyer R: Failure Mode of Different Cage Technologies & Materials - History and What We Learned. Spine Days. February, 2018; Berlin, Germany.
561. Guyer RD, Ohnmeiss DD: Supine vs. Upright Weight Bearing MRI in the Evaluation of Patients with Lumbar Spondylolisthesis. International Society for the Advancement of Spine Surgery. April, 2018; Toronto, Canada.
562. Guyer R: History and Rationale (of Cervical TDR). International Society for the Advancement of Spine Surgery. April, 2018; Toronto, Ontario, Canada.
563. Guyer RD, Zigler JE, Blumenthal SL, Ohnmeiss DD Analysis of Lumbar Total Disc Replacement Removals/Revisions during a 17 Year Experience with 1,707 Patients. International Society for the Advancement of Spine Surgery. April, 2018; Toronto, Canada.
564. Sasso R, Coric D, Phillips F, Guyer R, Blumenthal S, Zigler J, Sama, Cammisa F, Albert T: M6-C Artificial Cervical Disc 24 Month Follow up: Clinical and Radiographic Outcomes from Five Investigational Centers Involved in a US FDA Approved IDE Study. International Society for the Advancement of Spine Surgery. April, 2018; Toronto, Canada.
565. Blumenthal S, Zigler JE, Guyer RD, Ohnmeiss DD: Analysis of Lumbar Total Disc Replacement Removals/Revisions during a 17 Year Experience with 1,707 Patients. Global Spine Conference. April, 2018; Singapore.
566. Sasso R, Zigler J, Blumenthal S, Guyer R, Camissa F, Albert T, Coric D: Prospective, Multi-center Study with 24-month Follow-up Evaluating the M6-C Cervical Total Disc Replacement. Spine Society of Australia. April, 2018; Adelaide, Australia.
567. Zigler J, Blumenthal S, Guyer R, Ohnmeiss D: Analysis of Re-operations after Cervical Total Disc Replacement in a Consecutive Series of 504 Patients Receiving the ProDisc-C Device. Spine Society of Australia. April, 2018; Adelaide, Australia.
568. Blumenthal S, Zigler J, Guyer R, Ohnmeiss D: Analysis of Lumbar Total Disc Replacement Removals and Revisions: A 17-Year Experience. Spine Society of Australia. April, 2018; Adelaide, Australia.
569. Blumenthal S, Zigler J, Guyer R, Ohnmeiss D: Progression of Adjacent-level Degeneration after Lumbar Total Disc Replacement: Results of a Prospective Study with 5-year Follow-up. Spine Society of Australia. April, 2018; Adelaide, Australia.
570. Guyer RD: Evaluation of Biomechanical Changes of the Spine in Weight-Bearing: Quantitative Analysis with a Novel Method Qspine. June, 2018; Bangkok, Thailand.
571. Guyer RD: Have We Evolved in the Past 10 Years? Lumbar Fusion for Low Back Pain. The State of Spine Surgery Think Tank. June, 2018; Aruba.
572. Zigler JE, Guyer RD, Gornet MF, Ferko N, Cameron C, Patel L: Long-Term Outcomes of Lumbar Total Disc Replacement versus Spinal Fusion for the Treatment of DDD: A Novel Meta-Analysis of Randomized Controlled Trials. Spine Across the Sea. July-August, 2018; Kauai, Hawaii.

573. Guyer R, Blumenthal S, Zigler J, Ohnmeiss D: Analysis of Lumbar Total Disc Replacement Removals and Revisions: A 17-Year Experience. Spine Across the Sea. July-August, 2018; Kauai, Hawaii.
574. Guyer R, Ohnmeiss D, Blumenthal S, Zigler J: Analysis of Lumbar Total Disc Replacement Removals and Revisions: A 17-Year Experience. North American Spine Society. September, 2018; Los Angeles, California.
575. Guyer RD, Ohnmeiss DD: Clinical Outcomes of the PEEK-on-Ceramic Simplify® Disc: Preliminary Data from One Site Participating in the Single-Level Cervical FDA IDE Trial. North American Spine Society. September, 2018; Los Angeles, California.
576. Zigler JE, Blumenthal SL: Impact of Range of Motion on Patient Outcomes 5 Years Following Lumbar TDR at L5-S1. North American Spine Society. September, 2018; Los Angeles, California.
577. Zigler JE, Guyer RD, Blumenthal SL, Ohnmeiss DD: Analysis of Re-operations after Cervical Total Disc Replacement in a Consecutive Series of 504 Patients. North American Spine Society. September, 2018; Los Angeles, California.
578. Blumenthal SL, Guyer RD, Zigler JE: Impact of Range of Motion on Progression of Adjacent Segment Disease: Disc vs. Disc. North American Spine Society. September, 2018; Los Angeles, California.
579. Guyer RD, Ohnmeiss DD: Supine vs. Weight Bearing MRI in the Evaluation of Patients with Lumbar Spondylolisthesis. North American Spine Society. September, 2018; Los Angeles, California.
580. Millgram, Beutler, Guyer RD, Ashkenazi: Safe Posterior Thoracic Discectomy Through a Modified Transforaminal Thoracic Interbody Fusion (TTIF) Approach: Technique Description and Case Series. North American Spine Society. September, 2018; Los Angeles, California.
581. Guyer RD: Recurrent Disc Hernia, What to Do? Brussel Spine Symposium. November, 2018; Brussels, Belgium.
582. Guyer RD: Nucleus Replacement. Brussel Spine Symposium. November, 2018; Brussels, Belgium.
583. Guyer RD: Complications of Cervical Total Disc Replacement (Instructional Course: Complications). Cervical Spine Research Society. December, 2018. Las Vegas, Nevada.
584. Guyer R: Total Disc Replacement: Past, Present, and Future. Grand Rounds, University of Massachusetts Medical School, Department of Orthopedics. January, 2019; Worcester, Massachusetts.
585. Guyer R: L4-5 Spindy with Degenerative L3-4 / 5-1. Current Concepts in Spinal Disorders. February, 2019; Las Vegas, Nevada.
586. Guyer R: AI: I Can See Right Through You. Current Concepts in Spinal Disorders. February, 2019; Las Vegas, Nevada.

587. Guyer RD The Anterior Approach: Perfect Interaction with the Access Surgeon Is the Key to Successful Surgical Intervention (presented by international remote). Neurospine. February, 2019; Berne, Switzerland.
588. Guyer RD Total Lumbar Disc Prosthesis: Problems of Adoption in the States(presented by international remote). Neurospine. February, 2019; Berne, Switzerland.
589. Guyer RD: History and Rationale of Total Disc Replacement. (Instructional Course Lecture: Current State of Total Disc Replacement). American Academy of Orthopaedic Surgeons. March, 2019; Las Vegas, Nevada.
590. Guyer RD: Indications for Lumbar TDR (Instructional Course Lecture: Current State of Total Disc Replacement). American Academy of Orthopaedic Surgeons. March, 2019; Las Vegas, Nevada.
591. Guyer RD: The Role of Current Technologies in Spine Surgery. MORE International Symposium. April, 2019; Lagono, Switzerland.
592. Guyer RD: Future Trends: Where Will We Go? MORE International Symposium. April, 2019; Lagono, Switzerland.
593. Blumenthal SL, Guyer RD, Zigler JE, Ohnmeiss DD: Is Osteoporosis Screening Routinely Needed to Evaluate Cervical Total Disc Replacement Patients? Spine Society of Australia. April, 2019; Queensland, Australia.
594. Blumenthal SL, Ohnmeiss DD, Guyer RD, Zigler JE: In Which Cases Do Surgeons Specializing in Total Disc Replacement Perform Fusion in Patients with Symptomatic Lumbar Disc Degeneration? Spine Society of Australia. April, 2019; Queensland, Australia.
595. Blumenthal SL, Guyer RD, Zigler JE, Ohnmeiss DD: Is Osteoporosis Screening Routinely Needed to Evaluate Cervical Total Disc Replacement Patients? International Society for the Advancement of Spine Surgery. April, 2019; Anaheim, California.
596. Zigler JE, Guyer RD, Blumenthal SL, Ohnmeiss DD: Analysis of Re-operations after Cervical Total Disc Replacement in a Consecutive Series of 504 Patients Receiving the ProDisc-C Device. International Society for the Advancement of Spine Surgery. April, 2019; Anaheim, California.
597. Guyer RD, Zigler JE, Blumenthal SL, Ohnmeiss DD: In Which Cases Do Surgeons Specializing in Total Disc Replacement Perform Fusion in Patients with Cervical Spine Symptoms. International Society for the Advancement of Spine Surgery. April, 2019; Anaheim, California.
598. Guyer RD, Blumenthal SL, Zigler JE, Ohnmeiss DD, Vovk A: Spike vs. Keel: Does Endplate Design of Lumbar Artificial Discs Affect Radiographic Outcomes? International Society for the Advancement of Spine Surgery. April, 2019; Anaheim, California.
599. Zigler JE, Guyer RD, Blumenthal SL, Ohnmeiss DD: Clinical Outcome of Cervical Hybrid Surgery Using a Stand-alone Device at the Fusion Level. International Society for the Advancement of Spine Surgery. April, 2019; Anaheim, California.

600. Guyer RD, Coric D, Phillips F, Sasso R, Sama A, Cammisa F, Blumenthal SL, Albert T, Zigler JE: Clinical and Radiographic Outcomes for a Next Generation Artificial Cervical Disc: Two-Year Follow-Up at Five Investigational Centers Participating in a US FDA Approved Study. Global Spine Congress. May, 2019; Toronto, Ontario, Canada.
601. Guyer RD: Analysis of Long-Term Results from ADR Prospective Clinical Studies for Single Disc Disease. Global Spine Congress. May, 2019; Toronto, Ontario, Canada.
602. Guyer RD: Limiflex device. Castelli Spine. May, 2019; Key West, Florida.
603. Guyer RD: Motion Preservation: Past, Present, and Future. Castelli Spine. May, 2019; Key West, Florida.
604. Guyer RD: Vivex. Castelli Spine. May, 2019; Key West, Florida.
605. Guyer RD: ALIF Supine Is Safe, Simple and Effective. The State of Spine Surgery Think Tank. June, 2019; Aruba.
606. Guyer RD: New Pain Management Procedures. Who Is Best Trained to Perform Procedures That Blur the Line between Surgery and Interventional Pain Management. The State of Spine Surgery Think Tank. June, 2019; Aruba.
607. Blumenthal SL, Ohnmeiss DD, Zigler JE, Guyer RD: Impact of Previous Lumbar Spine Surgery on Outcome of Lumbar Total Disc Replacement: Analysis of Prospective 5-year Follow-up Study Data. International Society for the Study of the Lumbar Spine. June, 2019; Kyoto, Japan.
608. Guyer R: Lumbar Arthroplasty – A TBI Experience, Indications, Pearls, and Pitfalls. Deformity Down Under. Sydney, Australia; August, 2019.
609. Guyer R: M6C FDA Randomised Control Trial - 2 Year Data. Deformity Down Under. August, 2019; Sydney, Australia.
610. Guyer R: Biologics Smackdown – BMP Right Dose, Right Choice. Deformity Down Under. August, 2019; Sydney, Australia.
611. Guyer R: Complications in Spine Surgery – Case example of when it goes wrong and bail out methods used to salvage. Deformity Down Under. August, 2019; Sydney, Australia.
612. Guyer R: Titanium Coated PEEK. Deformity Down Under. August, 2019; Sydney, Australia.
613. Guyer RD, Nunley PD, Coric D, Ohnmeiss DD: Clinical Outcomes of a PEEK-on-Ceramic Total Disc Replacement: Data from 3 Sites Participating in the Single-Level Cervical FDA IDE Trial. North American Spine Society. September, 2019; Chicago, Illinois.
614. Guyer RD, Ohnmeiss DD, Blumenthal SL, Zigler JE: In Which Cases Do Surgeons Specializing in Total Disc Replacement Perform Fusion in Patients with Cervical Spine Symptoms? North American Spine Society. September, 2019; Chicago, Illinois.
615. Guyer RD, Blumenthal SL, Zigler JE, Shellock J, Phillips F, Coric D, Camissa F, Sasso R: A Novel Compressible Core Artificial Cervical Disc Compared to Anterior Cervical Discectomy and Fusion: 2 Year Clinical Results. North American Spine Society. September, 2019; Chicago, Illinois.

616. Blumenthal SL, Guyer RD, Zigler JE, Ohnmeiss DD: Is Osteoporosis Screening Routinely Needed to Evaluate Cervical Total Disc Replacement Patients? North American Spine Society. September, 2019; Chicago, Illinois.
617. Blumenthal SL, Guyer RD, Zigler JE, Ohnmeiss DD: Intraoperative Conversion of Cervical Total Disc Replacement to Fusion: Incidence and Reasons. North American Spine Society. September, 2019; Chicago, Illinois.
618. Guyer RD, Blumenthal SL, Zigler JE, Ohnmeiss DD: Impact of Previous Lumbar Spine Surgery on Outcome of Lumbar Total Disc Replacement: Analysis of Prospective Five-Year Follow-Up Study Data. North American Spine Society. September, 2019; Chicago, Illinois.
619. Guyer RD: ALIF (Anterior Lumbar Interbody Fusion). Chinese Society for the Study of the Lumbar. October, 2019; Nanjing, China.
620. Peloza J, Khoo L, Millgram M, Kutz S, Guyer R, Ashkenazi E: Improved Bone-removal using a New Device in Open and Minimal Invasive Approaches: A 2-center Experience with 143 Patients. Society for Minimally Invasive Spine Surgery. November, 2019; Las Vegas, Nevada.
621. Guyer RD: Anterior Posterior Fusion with Reduction of Spondylolisthesis with Indirect Decompression Only. Brussels International Spine Symposium. December, 2019; Brussels Belgium.
622. Guyer RD: How Much Indirect Decompression Is Needed for Relief of Symptoms Highlighting X-stop and Superior. Brussels International Spine Symposium. December, 2019; Brussels Belgium.
623. Guyer RD: How Photography Made Me a Better Spine Surgeon. Symposium on Current Concepts in Spinal Disorders. January, 2020; Las Vegas, Nevada.
624. Zigler JE, Guyer RD, Blumenthal SL, Ohnmeiss DD: Impact of Previous Lumbar Spine Surgery on Outcome of Lumbar Total Disc Replacement: Analysis of Prospective 5-year Follow-up Study Data. International Society for the Advancement of Spine Surgery. February, 2020; San Juan, Puerto Rico.
625. Guyer RD, Blumenthal SL, Beall, Wilson, Bishop, Tally, Temple, Ganey T, Ohnmeiss D: Clinical Investigation of the Safety and Preliminary Results of Cellularized Allograft Disc Matrix for the Treatment of Symptomatic Lumbar Disc Degeneration. International Society for the Advancement of Spine Surgery. February, 2020; San Juan, Puerto Rico.
626. Peloza JH, Khoo L, Millgram M, Guyer RD, Ashkenazi E: Improved Bone-removal Using a New Device in Open and Minimal Invasive Approaches: Cadaver Study and a 2-center Experience with 143 Patients. International Society for the Advancement of Spine Surgery. February, 2020; San Juan, Puerto Rico.
627. Guyer RD, Sasso R, Coric D, Ohnmeiss DD: Clinical Outcomes of a PEEK-on-Ceramic Total Disc Replacement: Data from Three Sites Participating in the Two-Level Cervical FDA IDE Trial. International Society for the Advancement of Spine Surgery. February, 2020; San Juan, Puerto Rico.

628. Blumenthal SL, Guyer RD, Zigler JE, Ohnmeiss DD: Intra-operative Conversion of Cervical Total Disc Replacement to Fusion: Incidence and Reasons. International Society for the Advancement of Spine Surgery. February, 2020; San Juan, Puerto Rico.
629. Millgram M, Kolsky, Guyer RD, Harel, Ashkenazi E: Improved Currently Osteophyte Removal Technique During Anterior Cervical Corpectomy and Fusion. International Society for the Advancement of Spine Surgery. February, 2020; San Juan, Puerto Rico.
630. Guyer RD: ALIF and LLIF. Chinese Society for the Study of the Lumbar Spine. July, 2020 (virtual meeting based in Beijing, China).
631. Guyer RD, Blumenthal SL, Ohnmeiss DD, Ferko N, Bonner A, Situ A: Incidence and Resolution Strategies for Early Onset Postoperative Leg Pain Following Lumbar Total Disc Replacement. (Best Papers Session) North American Spine Society. October, 2020 (virtual meeting).
632. Guyer RD, Nunley PD, Strenge B, Ohnmeiss DD: 2-level Cervical Disc Replacement Using a PEEK-on-Ceramic Device: Prospective Outcome Data From an FDA IDE Trial. (Best Papers Session) North American Spine Society. October, 2020 (virtual meeting)..
633. Coric D, Guyer RD, Carmody C, Sasso R, Musacchio MJ, Bae H, Ohnmeiss DD: Cervical Disc Replacement Using a PEEK-on-Ceramic Implant: Prospective Data from Seven Sites Participating in an FDA IDE Trial for Single-level Surgery. (Best Papers Session) North American Spine Society. October, 2020 (virtual meeting).
634. Derman PB, Ohnmeiss DD, Lauderback A, Guyer RD: Indirect Decompression for the Treatment of Degenerative Lumbar Stenosis: Clinical Outcome in a Consecutive Series of 568 Patients. North American Spine Society. October, 2020 (virtual meeting).
635. Guyer RD: Disc Arthroplasty As a Treatment for Low Back Pain. SILACO. April-May, 2021 (virtual meeting).
636. Phillips F, Coric D, Lanman T, Lavelle W, Milam A, Guyer RD, Pratt SR: Mid-Term 4-year Outcomes for Single-Level Total Disc Replacement with a Novel Viscoelastic Artificial Cervical Disc Compared to ACDF. International Society for the Advancement of Spine Surgery. May, 2021; Miami, Florida.
637. Guyer RD, Coric D, Nunley P, Sasso R, Musacchio M, Bae H, Pelozza J, Ohnmeiss DD: Single-level Cervical Disc Replacement Using a PEEK-on-Ceramic Implant: Results of a Multicenter FDA IDE Trial with 24-month Follow-up. International Society for the Advancement of Spine Surgery. May, 2021; Miami, Florida.
638. Sasso R, Boody B, Bae H, Lavelle W, Yoon ST, Kim K, Bains RS, Kuo C, Sandhu HS, Stauff M, Fischgrund J, Deutsch H, Yu E, Berven S, Ray WZ, Chapman J, Metkar U, Guyer RD, Crandall D, Wang M, Hassanzadeh H, Perez-Cruet M, Alamin T, Fielding L: FDA IDE Study of Lumbar Decompression and Paraspinal Tension Band Stabilization vs TLIF for Degenerative Spondylolisthesis: 12-month Outcomes in 205 Patients. International Society for the Advancement of Spine Surgery. May, 2021; Miami, Florida.
639. Blumenthal SL, Kiridly D, Shellock SL, Guyer RD, Zigler JE, Ohnmeiss DD: Late Failure of Cervical Disc Arthroplasty Due to Osteolysis. International Society for the Advancement of Spine Surgery. May, 2021; Miami, Florida.

640. Guyer RD: Long-term Outcomes of Cervical TDR and How They Compare to Fusion. Castellvi Spine. May, 2021; Key Largo, Florida.
641. Guyer RD, Coric D, Nunley PD, Sasso R, Musacchio M, Bae H, Peloza J, Ohnmeiss DD: Single-level Cervical Disc Replacement Using a PEEK-on-Ceramic Implant: Results of a Multicenter FDA IDE Trial with 24-month Follow-up. North American Spine Society. September-October, 2021; Boston, Massachusetts.
642. Guyer RD, Coric D, Nunley PD, Ohnmeiss DD: Cervical Total Disc Replacement: Available Implant Size Matters. North American Spine Society. September-October, 2021; Boston, Massachusetts.
643. Beall DP, Wilson GL, Gershon S, Burkus JK, Davis TT, Bishop R, Tally WC, Amirdelfan K, DePalma MJ, Hunter CW, Langhorst M, Guyer RD, Haladjian R: Viable Disc Tissue Allograft Supplementation in the Treatment of Degenerated Intervertebral Discs the One-year Results of a Randomized Control Trial. North American Spine Society. September-October, 2021; Boston, Massachusetts.
644. Guyer RD, DePalma MJ, Hunter CW, Froimson M, Burkus JK: The Viable Disc Tissue Allograft Supplementation (VAST) Randomized Controlled Trial in Patients with Chronic Discogenic Low Back Pain: Correlating Age with Clinical Outcome. North American Spine Society. September-October, 2021; Boston, Massachusetts.
645. Phillips FM, Coric D, Lanman TH, Lavelle WF, Milam IV R, Guyer RD: Midterm 4-year Outcomes for Single-Level Total Disc Replacement with a Novel Viscoelastic Artificial Cervical Disc Compared to ACDF. North American Spine Society. September-October, 2021; Boston, Massachusetts.
646. Blumenthal S, Kiridly D, Shellock J, Guyer R, Zigler J, Ohnmeiss D: Late Failure of Cervical Disc Arthroplasty Due to Osteolysis. Spine Society of Australia. November, 2021 (virtual meeting).
647. Guyer RD: Have CTDRs Evolved to the Point of Perfection? Spine Society of Australia. November, 2021 (virtual meeting).
648. Guyer R: Failed ALIF. Brussels International Spine Symposium. November, 2021; Brussels, Belgium.
649. Guyer R: Failed TLIF. Brussels International Spine Symposium. November, 2021; Brussels, Belgium.
650. Guyer RD, Coric D, Nunley PD, Sasso R, Musacchio M, Bae H, Peloza J, Ohnmeiss DD: Single-level Cervical Disc Replacement Using a PEEK-on-Ceramic Implant: Results of a Multicenter FDA IDE Trial with 24-month Follow-up. Cervical Spine Research Society. December, 2021; Atlanta, Georgia.
651. Guyer RD, Coric D, Nunley PD, Ohnmeiss DD: Cervical Total Disc Replacement: Available Implant Size Matters. (selected 3rd best abstract) Cervical Spine Research Society. December, 2021; Atlanta, Georgia.

POSTERS

1. Sachs BL, Vanharanta H, Rashbaum RF, Guyer RD, Hochschuler SH, Ohnmeiss DD, Schwartz P, Gilbert PJ: Objective Signs of Lumbar Radicular Syndrome in Conservative Treatment. International Society for the Study of the Lumbar Spine. June, 1986; Dallas, Texas.
2. Hochschuler SH, Guyer RD, Rashbaum RF: Proplast Reconstruction of the Iliac Crest for Anterior Lumbar Interbody Fusions and Anterior Cervical Fusions. International Society for the Study of Lumbar Spine. June, 1986; Dallas, Texas.
3. Vanharanta H, Sachs BL, Spivey M, Guyer RD, Rashbaum RF, Hochschuler SH, Ohnmeiss DD: Comparison of Disc Narrowing with Discographic Degenerative Changes and Pain Provocation. International Society for the Study of the Lumbar Spine. May, 1987; Rome, Italy.
4. Sachs BL, Vanharanta H, Rashbaum RF, Guyer RD, Hochschuler SH, Ohnmeiss DD, Schwartz P, Gilbert PJ: Comparison of Effect of Epidural Steroids and Physical Therapy on Root Tension Signs in Lumbar Radicular Syndrome. North American Spine Society. June, 1987; Banff, Canada.
5. Vanharanta H, Mooney V, Jarvis GL, Hochschuler SH, Guyer RD, Johnson RG, Gilbert PJ, Ritz S, Ohnmeiss DD, Stith WJ: Effect of Repeated Trunk Extension and Flexion Movements on CT/Discogram. North American Spine Society. June, 1987; Banff, Canada.
6. Hochschuler SH, Rashbaum RF, Guyer RD, Stith WJ, Ohnmeiss DD: Proplast Reconstruction of Iliac Crest Defects. North American Spine Society. June, 1987; Banff, Canada.
7. Vanharanta H, Sachs BL, Spivey M, Guyer RD, Rashbaum RF, Hochschuler SH, Ohnmeiss DD: Comparison of Disc Narrowing with Discographic Degenerative Change and Pain Provocation. American Academy of Orthopaedic Surgeons. February, 1988; Atlanta, Georgia.
8. Vanharanta H, Sachs BL, Aprill C, Spivey M, Ohnmeiss DD, Rashbaum RF, Hochschuler SH, Guyer RD, Videman T, Terry A, Selby D, Stith WJ, Mooney V: Disc Deterioration in Low Back Syndromes: A Prospective Multi-center CT/Discography Study. International Society for the Study of the Lumbar Spine. April, 1988; Bal Harbour, Florida.
9. Ohnmeiss DD, Stith WJ, Guyer RD, Rashbaum RF, Hochschuler SH, Loguidice VA, Lonstein M: Comparison of Results of Lumbar Anterior Interbody Fusion, Posterior Fusion, Instrumentation and 360° Fusion Performed by the Same Group of Surgeons. International Society for the Study of the Lumbar Spine. April, 1988; Bal Harbour, Florida.
10. Shea D, Stith WJ, Ohnmeiss DD, Hochschuler SH, Guyer RD, Rashbaum RF: The Effect of Sensory Deprivation on the Reduction of Pain in Chronic Low Back Patients. International Society for the Study of the Lumbar Spine. April, 1988; Bal Harbour, Florida.
11. Vanharanta H, Ohnmeiss DD, Stith WJ, Hochschuler SH, Guyer RD, Mooney V: Effect of Repeated Trunk Extension and Flexion Movements As Seen By CT/Discography. International Society for the Study of the Lumbar Spine. April, 1988; Bal Harbour, Florida.

12. Vanharanta H, Sachs BL, Aprill C, Spivey M, Ohnmeiss DD, Rashbaum RF, Hochschuler SH, Guyer RD, Videman T, Stith WJ, Mooney V: CT/Discography and Pain Response in Different Age Groups. North American Spine Society. July, 1988; Colorado Springs, Colorado.
13. Guyer RD, Ohnmeiss DD, Stith WJ, Hochschuler SH, Rashbaum RF, Loguidice VA, Lonstein M: Comparison of Results of Lumbar Anterior Interbody Fusion, Posterior Fusion, Instrumentation and 360° Fusion Performed by the Same Group of Surgeons. North American Spine Society. July, 1988; Colorado Springs, Colorado.
14. Guyer RD, Ohnmeiss DD, Stith WJ, Hochschuler SH, Rashbaum RF, Lonstein M, Regan JJ: An Analysis of the Effects of Repeat Discography. North American Spine Society. July, 1988; Colorado Springs, Colorado.
15. Ohnmeiss DD, Vanharanta H, Stith WJ, Carranza CB, Guyer RD, Rashbaum RF, Hochschuler SH: Radiographic Muscle Density and Increased Function Following an Active Rehabilitation Program. International Society for the Study of the Lumbar Spine. May, 1989; Kyoto, Japan.
16. Guyer RD, Vanharanta H, Ohnmeiss DD, Stith WJ, Sachs BL, Hochschuler SH, Rashbaum RF: Validity of Myelographic and CT/Discographic Images in Identifying Clinically Painful Disc Lesions. North American Spine Society. June, 1989; Quebec City, Canada.
17. Lonstein ML, Guyer RD, Ohnmeiss DD, Stith WJ, Hochschuler SH, Rashbaum RF: Posterior Lumbar Fusion and Instrumentation. North American Spine Society. June, 1989; Quebec City, Canada.
18. Vanharanta H, Ohnmeiss DD, Stith WJ, Guyer RD, Hochschuler SH, Rashbaum RF, Sachs BL: The Effect of Lumbar Level in Painful Disc Deterioration. North American Spine Society. June, 1989; Quebec City, Canada.
19. Ohnmeiss DD, Vanharanta H, Stith WJ, Carranza CB, Guyer RD, Rashbaum RF, Hochschuler SH: Radiographic Muscle Density and Increased Function Following an Active Rehabilitation Program. North American Spine Society. June, 1989; Quebec City, Canada.
20. Vanharanta H, Ohnmeiss DD, Stith WJ, Guyer RD, Hochschuler SH, Rashbaum RF, Sachs BL: Sensitivity and Specificity of CT/Discography. North American Spine Society. June, 1989; Quebec City, Canada.
21. Shea DD, Ohnmeiss DD, Stith WJ, Rashbaum RF, Guyer RD, Hochschuler SH: The Effects of Sensory Deprivation on Muscle Activity and Pain Reduction in Chronic Low Back Pain Patients. North American Spine Society. June, 1989; Quebec City, Canada.
22. Guyer RD, Hochschuler SH, Ohnmeiss DD, Rashbaum RF, Regan JJ, Stith WJ: Initial Results and Complications of Pedicle Screw Fixation. Scoliosis Research Society/North American Spine Society joint conference on Advanced Pedicle Fixation of the Lumbar Spine. March, 1990; Dallas, Texas

23. Guyer RD, Vanharanta H, Ohnmeiss DD, Stith WJ, Sachs BL, Hochschuler SH, Rashbaum RF: Validity of Myelographic and CT/Discographic Images in Identifying Clinically Painful Disc Lesions. International Association for the Study of Pain. April, 1990; Australia.
24. Guyer RD, Vanharanta H, Ohnmeiss DD, Stith WJ, Hochschuler SH, Rashbaum RF, Regan JJ: The Relationship Between Pain Drawings and CT/Discographic Findings. International Society for the Study of the Lumbar Spine. May, 1990; Boston, Massachusetts.
25. Guyer RD, Ohnmeiss DD, Hochschuler SH, Stith WJ, Rashbaum RF, Regan JJ: The Use of CT/Discography to Identify Recurrent Disc Herniation Not Visualized by Gadolinium Enhanced MRI. International Society for the Study of the Lumbar Spine. June, 1990; Boston, Massachusetts.
26. Hochschuler SH, Guyer RD, Ohnmeiss DD, Stith WJ, Rashbaum RF, Regan JJ: Anterior Lumbar Interbody Fusion with Composite Bone-Bank Bone. International Society for the Study of the Lumbar Spine. June, 1990; Boston, Massachusetts.
27. Hochschuler SH, Guyer RD, Ohnmeiss DD, Stith WJ, Rashbaum RF, Regan JJ: Anterior Lumbar Interbody Fusion Using Donor Femur Bone Grafts. North American Spine Society. August, 1990; Monterey, California.
28. Hochschuler SH, Guyer RD, Ohnmeiss DD, Glisan B, Sheets C, Evans D, Stith WJ, Rashbaum RF, Regan JJ: The Effects of Wearing an Abdominal Support Belt on the Amount of Weight Lifted by Low Back Pain Patients. North American Spine Society. August, 1990; Monterey, California.
29. Guyer RD, Hochschuler SH, Ohnmeiss DD, Rashbaum RF, Regan JJ, Stith WJ: Initial Results and Complications of Pedicle Screw Fixation. North American Spine Society. August, 1990; Monterey, California.
30. Guyer RD, Ohnmeiss DD, Hochschuler SH, Stith WJ, Rashbaum RF, Regan JJ: The Use of CT/Discography to Identify Recurrent Disc Herniation Not Visualized by Gadolinium Enhanced MRI. North American Spine Society. August, 1990; Monterey, California.
31. Vanharanta H, Guyer RD, Ohnmeiss DD, Hochschuler SH, Rashbaum RF, Stith WJ: The Number of Painful and Degenerated Lumbar Discs Levels in Low Back Pain Patients. North American Spine Society. August, 1990; Monterey, California.
32. Guyer RD, Vanharanta H, Ohnmeiss DD, Stith WJ, Hochschuler SH, Rashbaum RF, Regan JJ: The Relationship Between Pain Drawings and CT/Discographic Findings. North American Spine Society. August, 1990; Monterey, California.
33. Guyer RD, Hochschuler SH, Ohnmeiss DD, Rashbaum RF, Regan JJ, Stith WJ: Initial Results and Complications Associated with the Wiltse Pedicle Screw Fixation System. American Academy of Orthopaedic Surgeons. March, 1991; Anaheim, California.
34. Guyer RD, Ohnmeiss DD, Hochschuler SH, Stith WJ, Rashbaum RF, Regan JJ: The Use of CT/Discography to Identify Recurrent Disc Herniation Not Visualized by Gadolinium Enhanced MRI. American Academy of Orthopaedic Surgeons. March, 1991; Anaheim, California.

35. Hochschuler SH, Guyer RD, Castleman C, Ohnmeiss DD, Stith WJ, Spivey MA, Rashbaum RF, Regan JJ: Cine MRI to Visualize Functional Pathology in the Spine. American Academy of Orthopaedic Surgeons. March, 1991; Anaheim, California.
36. Hochschuler SH, Guyer RD, Ohnmeiss DD, Rashbaum RF, Regan JJ: Single-level Stabilization with Femur Grafts. International Society for the Study of the Lumbar Spine. May, 1991; Heidelberg, Germany.
37. Hochschuler SH, Guyer RD, Castleman C, Ohnmeiss DD, Stith WJ, Spivey MA, Rashbaum RF, Regan JJ: Cine MRI to Visualize Functional Pathology in the Spine. International Society for the Study of the Lumbar Spine. May, 1991; Heidelberg, Germany.
38. Rashbaum RF, Ohnmeiss DD, Stith WJ, Bogdanffy GM, Guyer RD, Hochschuler SH, Regan JJ: Initial Results of Spinal Cord Stimulation in Chronic Pain Patients. International Society for the Study of the Lumbar Spine. May, 1991; Heidelberg, Germany.
39. Hochschuler SH, Guyer RD, Ohnmeiss DD, Stith WJ, Rashbaum RF, Regan JJ: Comparison of Single Level Arthroscopic Microdiscectomy to Laminectomy and Discectomy. North American Spine Society. August, 1991; Keystone, Colorado.
40. Hochschuler SH, Guyer RD, Ohnmeiss DD, Rashbaum RF, Regan JJ: Single-level Stabilization with Femur Grafts. North American Spine Society. August, 1991; Keystone, Colorado.
41. Rashbaum RF, Ohnmeiss DD, Stith WJ, Guyer RD, Hochschuler SH, Regan JJ: Initial Results of Spinal Cord Stimulation in Chronic Pain Patients. North American Spine Society. August, 1991; Keystone, Colorado.
42. Guyer RD, Hochschuler SH, Ohnmeiss DD, Stith WJ, Spivey MA, Castleman C, Rashbaum RF, Regan JJ: Cine MRI to Visualize Functional Pathology in the Spine. North American Spine Society. August, 1991; Keystone, Colorado.
43. Guyer RD, Ohnmeiss DD, Stith WJ, Bonnick SL, Hochschuler SH, Rashbaum RF, Regan JJ: Changes in Vertebral Bone Density Following Lumbar Spine Fusion and Post-operative Bracing. North American Spine Society. August, 1991; Keystone, Colorado.
44. Guyer RD, Hochschuler SH, Ohnmeiss DD, Stith WJ, Spivey MA, Castleman C, Rashbaum RF, Regan JJ: Dynamic MRI: A New Technique to Identify Functional Pathology in the Spine. Cervical Spine Research Society. December, 1991; Philadelphia, Pennsylvania.
45. Hochschuler SH, Guyer RD, Ohnmeiss DD, Stith WJ, Rashbaum RF, Regan JJ: Comparison of Single Level Arthroscopic Microdiscectomy to Laminectomy and Discectomy. American Academy of Orthopaedic Surgeons. February, 1992; Washington, D.C.
46. Regan JJ, Shelokov AP, Guyer RD, Hochschuler SH, Rashbaum RF: Correction of Lumbar Scoliosis in Adults Using the Texas Scottish Rite Hospital System Anteriorly. International Society for the Study of the Lumbar Spine. May, 1992; Chicago, Illinois.

47. Floyd T, Hochschuler SH, Vanharanta H, Ohnmeiss DD, Guyer RD: The Relationship of Facet Tropism to Degenerative Disc Disease. International Society for the Study of the Lumbar Spine. May, 1992; Chicago, Illinois.
48. Bogdanffy GM, Ohnmeiss DD, Guyer RD, Griffith SL: Bone Mineral Density Above a Multi-Segmental Lumbar Spinal Fusion. American Society for Bone and Mineral Research. September, 1992; Minneapolis, Minnesota.
49. Guyer RD, Hochschuler SH, Bogdanffy GM, Ohnmeiss DD: Early Changes in Pain and Physical Function Following Lumbar Spinal Fusion. International Society for the Study of the Lumbar Spine. June, 1993; Marseilles, France.
50. Perim DM, Guyer RD, Elliott FT, Ohnmeiss DD, Alfano S: Lumbar Laminectomy-Discectomy: Factors Associated with Increased Cost and Extended Treatment. International Society for the Study of the Lumbar Spine. June, 1993; Marseilles, France.
51. Yrjämä M, Vanharanta H, Ohnmeiss DD, Hochschuler SH, Guyer RD: Vibration of the Spinous Process Provokes Pain Similar to That Produced by Discography. North American Spine Society. October, 1993; San Diego, California.
52. Ohnmeiss DD, Vanharanta H, Guyer RD, Hochschuler SH: The Association Between Pain Drawings and Discordant Discographic Pain Reports. North American Spine Society. October, 1993; San Diego, California.
53. Ohnmeiss DD, Vanharanta H, Guyer RD, Hochschuler SH: The Relationship Between Pain Location and Disc Pathology: A Study of Pain Drawings and CT/Discography. North American Spine Society. October, 1993; San Diego, California.
54. Block AR, Vanharanta H, Ohnmeiss DD, Guyer RD, Hochschuler SH: Discordant CT/Discography Results: Psychological Factors Play a Role. North American Spine Society. October, 1993; San Diego, California.
55. Bogdanffy GM, Ohnmeiss DD, Griffith SL, Guyer RD: Non-Radiological Screening of Bone Quality for Spinal Fusion Candidates. North American Spine Society. October, 1993; San Diego, California.
56. Weinhoffer SL, Guyer RD, Herbert M, Griffith SL, Ohnmeiss DD: In-Vitro Intradiscal Pressure Measurements above a Simulated Instrumented Fusion. American Academy of Orthopaedic Surgeons. February, 1994; New Orleans, Louisiana.
57. Bogdanffy GM, Ohnmeiss DD, Guyer RD: Early Changes in Bone Mineral Density above a Combined Anterior-Posterior L4-S1 Lumbar Spinal Fusion In-Vivo. Orthopaedic Research Society. February, 1994; New Orleans, Louisiana.
58. Ohnmeiss DD, Hochschuler SH, Guyer RD: Patient Selection Criteria for Laser Disc Decompression. International Society for the Study of the Lumbar Spine. June, 1994; Seattle, Washington.
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