#### Curriculum Vitae

# Richard D. Guyer, M.D.

Office Address: Center for Disc Replacement at Texas Back Institute

6020 West Parker Road, #200

Plano, Texas 75093

### **EDUCATION**

1964 to 1967 Wissahickon High School, Ambler, Pennsylvania1967 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 Spine Surgery 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

## MEDICAL LICENSURE

Texas - 1980 - F7477 Pennsylvania - 1976 - MD-018269-E California - 1982-645442

## **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	Urisnus College Alumni Award
2020	North American Spine Society Leon Wiltse Award
2007	Best Doctors in Dallas
2009-23	Best Doctors in Dallas
2010,13	Best Doctors in the US
2012-24	Best Doctors in Collin County
2023	Texas Monthly Superdocs
2013-24	Castle Conolly Top Doctors

### 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, 3<sup>rd</sup> 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: Extraosseous 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 anular 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.
- 29. Ohnmeiss DD, Vanharanta H, Guyer RD: The Association Between Pain Drawings and CT/Discographic Pain Responses. Spine 20(6):729-733, 1995.
- 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) Phosholipase A2 and Inflammatory Cells in Macroscopically Normal, Degenerated and Herniated Human Lumbar Disc Tissue. Spine 21(22):2531-2538, 1996.
- 37. Regan JJ, McAfee PC, Guyer RD, Aronoff RJ: Laparoscopic fusion of the lumbar spine in a multicenter series of the first 34 consecutive patients. Surg Laparosc Endosc 6(6):459-68, 1996.
- 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<sup>TM</sup> 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<sup>TM</sup> 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.
- 80. Geisler FH, Guyer RD, Blumenthal SL, McAfee PC, Cappuccino A, Bitan F, Regan JJ: Effect of Previous Surgery on Clinical Outcome Following 1-level Lumbar Arthroplasty. J Neurosurg Spine 8(2):108-114, 2008.

- 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. Columa/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 Preoperatively 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 Neurosug 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, Lauryssen 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, Lauryssen 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.
- 104. Büttner-Janz K, Guyer RD, Ohnmeiss DD: Indications for Lumbar Total Disc Replacement: Selecting the Right Patient with the Right Indication for the Right Total Disc. Int J Spine Surg 8:doi: 10.14444/1012, 2014.
- 105. Hipp J, Guyer RD, Zigler JE, Ohnmeiss DD, Wharton ND: Development of a Novel Radiographic Measure of Lumbar Instability and Validation Using the Facet Fluid Sign. Int J Spine Surg 9:37; doi: 10.14444/2037, 2015.
- 106. Lieberman IH, Hu X, Ohnmeiss DD, Guyer RD, Zigler JE: Restoration of Cervical Alignment Is Associated with Improved Clinical Outcome after One and Two Level Anterior Cervical Discectomy and Fusion. Int J Spine Surg Int J Spine Surg 9:61, 2015.
- 107. Guyer RD, Pettine K, Roh JS, Dimmig TA, Coric D, McAfee, PC, Ohnmeiss DD: Five-year Follow-up of a Prospective, Randomized Trial Comparing Two Lumbar Total Disc Replacements. Spine 41(1):3-8, 2016.

- 108. Musacchio MJ, Lauryssen C, Davis RJ, Bae HW, Peloza JH, Guyer RD, Zigler JE, Ohnmeiss DD, Leary S: Evaluation of Decompression and Interlaminar Stabilization Compared with Decompression and Fusion for the Treatment of Lumbar Spinal Stenosis: 5-year Follow-up of a Prospective, Randomized, Controlled Trial. Int J Spine Surg 10:6 doi: 10.14444/3006, 2016.
- 109. Guyer RD: Cervical Coronal Alignment Matters. Spine J 16(4):480-481, 2016.
- 110. Guyer RD, Abitbol JJ, Ohnmeiss DD, Yao C: Evaluating Osseointegration into a Deeply Porous Titanium Scaffold: A Biomechanical Comparison with PEEK and Allograft. Spine 41(19):E1146-E1150, 2016.
- 111. Nunley PD, Shamie N, Blumenthal SL, Orndorff D, Block JE, Geisler FH: Interspinous Process Decompression: Expanding Treatment Options for Lumbar Spinal Stenosis. BioMed Research Internat 2016:3267307, 2016.
- 112. Guyer R, Musacchio M, Cammisa Jr, FP, Lorio ML: ISASS Recommendations/Coverage Criteria for Decompression with Interlaminar Stabilization Coverage Indications, Limitations, and/or Medical Necessity. Int J Spine Surg 10:doi:10.14444/3041, 2016.
- 113. Gornet M, Buttermann G, Guyer R, Yue J, Ferko N, Hollmann S: Defining the Ideal Lumbar Total Disc Replacement Patient and Standard of Care. Spine 42(Suppl 24):S103-S107, 2017.
- 114. Coric D, Bullard DE, Patel VV, Ryaby JT, Atkinson JL, He D, Guyer RD: Pulsed Electromagnetic Field Stimulation May Improve Fusion Rates in Cervical Arthrodesis in High-risk Populations. Bone Joint Res 7(2):124-130, 2018.
- 115. Coric D, Guyer RD, Nunley PD, Musante D, Carmody C, Gordon C, Lauryssen C, Boltes MO, Ohnmeiss DD: Prospective, Randomized, Multicenter Study of Cervical Arthroplasty versus Anterior Cervical Discectomy and Fusion: 5-year Results with a Metal-on-Metal Artificial Disc. J Neurosurg Spine 28(3):252-261, 2018.
- 116. Zigler JE, Blumenthal SL, Guyer RD, Ohnmeiss DD, Patel L: Relationship of Range of Motion and Adjacent Level Degeneration Following Lumbar Total Disc Replacement: Results of a Prospective Study with 5-year Follow-up. Spine 43(20):1395-1400, 2018.
- 117. Guyer RD, Voronov LI, Havey RM, Khayatzadeh S, Carandang G, Blank KR, Werner S, Rubin J, Padovani N, Patwardhan AG: Kinematic Assessment of an Elastic-Core Cervical Disc Prosthesis in One and Two-Level Constructs. JOR Spine 1:e1040, 2018.
- 118. Pflugmacher R, Franzini A, Horovitz S, Guyer R, Ashkenazi E: Suitability of Administrative Databases for Durotomy Incidence Assessment: Comparison to the Incidence Associated with Bone-Removal Devices, Calculated Using a Systemic Literature Review and Clinical Data. Int J Spine Surg 12(4):498-509, 2018.
- 119. Millgram MA, Kolsky DE, Beutler WJ, Guyer RD, Ashkenazi E: A New High-Speed Shielded Curved Device Allowing Safe Posterior Thoracic Discectomy Through a Modified Transforaminal Thoracic Interbody Fusion Approach: Technique Description and Case Series. Int J Spine Surg 13(6):6069, 2019.
- 120. Braxton Jr. E, Wohlfeld BJ, Blumenthal S, Bozzio A, Butterman G, Guyer R, Idema I, Laich D, Morreale J, Nikolakis M, Patel A, Price JS, Witt JP, Zigler J, Martin M:

- Postoperative Care Pathways Following Lumbar Total Disc Replacement: Results of a Modified Delphi Approach. Spine 44(Suppl 24):S1-S12, 2019.
- 121. Derman PB, Sikora-Klak J, Guyer R: When Is an Incidental Durotomy a Complication during Lumbar Spine Surgery? Spine J 20(5):685-687, 2020.
- 122. Radcliff K, Guyer RD: Economics of Cervical Disc Replacement. Int J Spine Surg. 14(S2):S67-S72, 2020.
- 123. 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? Eur Spine J 29(11):2665-2669, 2020.
- 124. Zigler JE, Guyer RD, Blumenthal SL, Ohnmeiss DD: Analysis of Re-operations after Cervical Total Disc Replacement in a Consecutive Series of 535 Patients Receiving the ProDisc-C Device. Eur Spine J 29(11):2683-2687, 2020.
- 125. Phillips FM, Coric D, Sasso R, Lanman T, Lavelle W, Blumenthal S, Lauryssen C, Guyer R, Albert T, Zigler J, Cammisa F, Milam RA: Prospective, Multicenter Clinical Trial Comparing M6-C Compressible Six Degrees of Freedom Cervical Disc with Anterior Cervical Discectomy and Fusion for the Treatment of Single Level Degenerative Cervical Radiculopathy: Two- Year Results of an FDA Investigational Device Exemption Study. Spine J 21(2):239-252, 2021.
- 126. Peloza JH, Millgram MA, Jacobian E, Kolsky DE, Guyer RD, Le Huec JC, Ashkenazi E: Economic Analysis of Transforaminal Lumbar Interbody Fusion Surgery Utilizing a Curved Bone Removal Device. Pharmacoecon Open 5(3):519-531, 2021.
- 127. Guyer RD, Albano J, Ohnmeiss DD: Cervical Total Disc Replacement: Novel Devices. Neurosurg Clin N Amer 32:449-460, 2021.
- 128. Perfetti DC, Galina JM, Derman PB, Guyer RD, Ohnmeiss DD, Satin AM: Risk Factors for Reoperation after Lumbar Total Disc Replacement at Short-, Mid-, and Long-term Follow-up. Spine J 21(7):1110-1117, 2021.
- 129. Guyer RD, Coric D, Nunley PD, Sasso RC, Musacchio M, Bae HW, 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. Int J Spine Surg 15(4):633-644, 2021.
- 130. Guyer RD, Ferko N, Bonner A, Situ A, Ohnmeiss DD: Incidence and Resolution Strategies for Early-Onset Postoperative Leg Pain Following Lumbar Total Disc Replacement. Int J Spine Surg 15(5): 978-987, 2021.
- 131. Derman PB, Ohnmeiss DD, Lauderback A, Guyer RD: Indirect Decompression for the Treatment of Degenerative Lumbar Stenosis. Int J Spine Surg 15(6):1066-1071, 2021.
- 132. Guyer RD, Coric D, Nunley PD, Ohnmeiss DD: Cervical Total Disc Replacement: Available Implant Size Matters. Clin Spine Surg 35(4):166-169, 2022.
- 133. Samartzis D, Colloca C, Guyer R, Hu S, Nordin M, Blumenthal S: Robert Gunzburg and Marek Szpalski: 2022 ISSLS Wiltse Lifetime Achievement Award. Spine 47(11):E494-E498, 2022.

- 134. Hunter CW, Guyer R, Froimson M, DePalma MJ: Effect of Age on Outcomes after Allogeneic Disc Tissue Supplementation in Patients with Chronic Discogenic Low Back Pain in the VAST Trial. Pain Manag 12(3): 301-311, 2022.
- 135. Satin AM, Shenoy K, Sheha ED, Basques B, Schroeder GD, Vaccaro AR, Lieberman IH, Guyer RD, Derman PB: Spine Patient Satisfaction With Telemedicine During the COVID-19 Pandemic: A Cross-Sectional Study. Accepted for publication in Global Spine J 12(5):812-819, 2022.
- 136. Haddas R, Pipkin W, Hellman D, Voronov L, Kwon YH, Guyer R: Is Golf a Contact Sport? Protection of the Spine and Return to Play After Lumbar Surgery. Global Spine J 12(2):298-307, 2022.
- 137. Zigler JE, Guyer RD, Blumenthal SL, Satin AM, Shellock JL, Ohnmeiss DD: In Which Cases Do Surgeons Specializing in Total Disc Replacement Perform Fusion in Patients with Symptomatic Lumbar Disc Degeneration? Eur Spine J 31(10):2607-2611, 2022.
- 138. Coric D, Guyer RD, Bae H, Nunley PD, Strenge B, Peloza JH, Ohnmeiss DD, Boltes MO: Prospective, Multicenter Study of Two-level Cervical Arthroplasty with a PEEK-on-Ceramic Artificial Disc. J Neurosurg Spine 37(3):357-367, 2022.
- 139. Guyer RD, Zigler JE, Blumenthal SL, Shellock JL, Ohnmeiss DD: Evaluation of Anterior Lumbar Interbody Fusion Performed Using a Stand-alone, Integrated Fusion Cage. Int J Spine Surg 17(1):1-5, 2023.
- 140. Blumenthal SL, Guyer RD, Zigler JE, Ohnmeiss DD: Impact of Previous Lumbar Spine Surgery on the Outcome of Lumbar Total Disc Replacement: Analysis of Prospective 5-year Follow-up Study Data. Eur Spine J. 32(3):797-802, 2023.
- 141. Satin AM, Rogers-LaVanne MP, Albert TJ, Hilibrand AS, Schoenfeld AJ, Guyer RD: Best Practices for the Spine Fellowship Match: Interview Statistics, Applicant Perspectives, What Programs Look for in Fellowship Applicants, and Guidance. Spine 48(6):371-375, 2023.
- 142. Peloza J, Malone H, Jacobian E, Kolsky DE, Harel R, Guyer RD, Millgram MA, Ashkenazi E: The Use of a New High-Speed Shielded Curved Drill Is Associated with Improved Intraoperative and Clinical Outcomes after Cervical Corpectomy and Fusion Procedures: A Retrospective Case Series. J Orthop Surg Res 18(1):364, 2023.
- 143. Courtois EC, Ohnmeiss DD, Guyer RD: Assessing Lumbar Vertebral Bone Quality: A Methodological Evaluation of CT and MRI as Alternatives to Traditional DEXA. Eur Spine J 32(9):3176-3182, 2023.
- 144. Courtois EC, Davidson IU, Ohnmeiss DD, Guyer RD: Evaluating Alternatives to DEXA for Assessing Bone Quality in Patients Undergoing Spine Surgery. J Neurosurg Spine 40(1):84-91, 2024.
- 145. Guyer RD, Blumenthal SL, Shellock JL, Zigler JE, Ohnmeiss DD: Lumbar Total Disc Replacement Device Removals and Revisions Performed During a 20 Year Experience with 2,141 Patients. Spine 49(10):671-676, 2024.

- Blumenthal SL, Ohnmeiss DD, Courtois EC, Guyer RD, Zigler JE, Shellock JL: Treatment of Failed Cervical Total Disc Replacements in a Series of 53 Cases and Description of a Management Strategy. Eur Spine J 33(8):3117-3123, 2024.
- 147. Blumenthal SL, Edionwe J, Courtois EC, Guyer RD, Satin AM, Ohnmeiss DD: Is the Use of Intra-operative Neuromonitoring Justified during Lumbar Anterior Approach Surgery? Int J Spine Surg 18(2):217-221, 2024.
- 148. Blumenthal SL, Griffin CW, Courtois EC, Guyer RD, Zigler JE, Shellock JL, Ohnmeiss DD: Removals and Revisions of Cervical Total Disc Replacement Devices in a Consecutive Series of 1,626 Patients Beginning with the First Case Experience in 2003. Spine 49(19):1348-1351, 2024.
- 149. Guyer RD, Bae H, Coric D, Nunley PD, Sasso RC, Musacchio M, Ohnmeiss DD: Five-year Follow-up of a Prospective Food and Drug Administration Investigational Device Exemption Trial Evaluating a PEEK-on-Ceramic Cervical Disc Replacement. Spine 50(1):1-9, 2025.
- 150. Shellock JL, Zigler JE, Blumenthal SL, Guyer RD, Ohnmeiss DD: Clinical Outcome of Lumbar Hybrid Surgery in a Consecutive Series of Patients with Long-term Follow-up. Spine 50(2):110-114, 2025.
- 151. Satin AM, Shenker T, Guyer RD, Blumenthal SL, Zigler JE, Shellock JL, Derman PB, Ohnmeiss DD, Rogers-LaVanne MP: Cervical Total Disc Replacement for the Treatment of Adjacent Segment Disease after Anterior Cervical Discectomy and Fusion. Spine 50(4):243-251, 2025.

#### **CURRENTLY SUBMITTED FOR PUBLICATION**

- 1. Fisher KJ, Blumenthal SL, Guyer RD, Zigler JE, Shellock JL, Ohnmeiss DD: Intraoperative Conversion of Primary Cervical Total Disc Replacement to Fusion: Incidence and Reasons. Submitted to Spine.
- 2. Fisher K, Satin AM, Ohnmeiss DD, Guyer RD: Physical and Virtual Simulation in Spine Surgery. Submitted to Spine.

### **BOOKS AND BOOK CHAPTERS**

- 1. Guyer RD (Editor): <u>SPINE State of the Art Review: Lumbar Disc Disease</u>. Hanley & Belfus; Philadelphia, January, 1989.
- 2. Flemming J, Guyer RD: *Diagnostic Dilemmas*. In: Guyer RD (ed) <u>SPINE State of the Art Review: Lumbar Disc Disease</u>. Hanley & Belfus; Philadelphia, January 1989; pp 153-172.
- 3. Guyer RD, Flemming J: *Laminectomy-Indications, Techniques and Complications*. In: Guyer RD (ed) <u>SPINE State of the Art Review: Lumbar Disc Disease</u>. Hanley & Belfus; Philadelphia, January 1989; pp 91-102.
- 4. Guyer RD: *Lumbar CT/Discography*. In: P Kambin (ed) <u>Percutaneous Approach to the Lumbar Spine</u>. Urban & Schwarzenberg Medical Publishers, Inc. 1990.

- 5. Guyer RD: *Lumbar CT/discography*. In: P Kambin (ed) <u>Arthroscopic Microdiscectomy:</u> <u>Minimal Intervention in Spine Surgery</u>. Baltimore; Urban & Schwarzenberg; 1991, pp 49-56.
- 6. Matwijecky C, Guyer RD: *Cervical Discectomy and Fusion*. In: Regan JJ (ed) <u>SPINE-State of the Art Review: Cervical Spine Disease</u>. Hanley & Belfus, Inc., Philadelphia, 1991; pp 259-271.
- 7. Hochschuler SH, Guyer RD, Cotler HB (Editors): <u>Rehabilitation of the Spine: Science and Practice</u>. Mosby Year Book, Chicago, 1993.
- 8. Guyer RD: *Laboratory Testing*. In: Hochschuler SH, Guyer RD, Cotler HB (eds)
  Rehabilitation of the Spine: Science and Practice. Mosby Year Book, Chicago, 1993. pp
  113-118.
- 9. Hochschuler SH, Guyer RD: *Arthroscopic Microdiscectomy*. In: Hochschuler SH, Guyer RD, Cotler HB (eds) <u>Rehabilitation of the Spine: Science and Practice</u>. Mosby Year Book, Chicago, Illinois; 1993; pp 601-608.
- 10. Guyer RD, Kambin P: *Arthroscopic Microdiscectomy: Posterolateral Approach.* In: Regan JJ, McAfee PC, Mack MJ (eds) <u>Atlas of Endoscopic Spine Surgery</u>. Quality Medical Publishing. St. Louis, MO. 1995. pp 257-274.
- 11. Guyer RD, Ohnmeiss DD: *Invasive Radiology and Pain Location*. In: Margulies J (ed) SPINE: State of the Art Review: Adult L5-S1 Surgery. Hanley & Belfus, Philadelphia; 1997; pp 59-67.
- 12. Guyer RD, Delamarter RB, Fulp T, Small SD: *Complications of Cervical Spine Surgery*. In: H Herkowitz et al. (eds) <u>The Spine</u>. WB Saunders Company; Philadelphia, Pennsylvania 1999; pp 540-557.
- 13. Guyer R, Fulp T: *Minilaparotomy: Perirectus Retroperitoneal Approach for Anterior Lumbar Interbody Fusion*. In: Zdeblick TA (ed) <u>Anterior Approaches in Spine Surgery</u>. Quality Medical Publishing, Inc., St. Louis, Missouri 1999; pp 203-207.
- 14. Guyer RD, Ohnmeiss DD: *Pain Evaluation, Invasive Radiology, and Patient Selection in Previously Operated Patients*. In: Margulies J (ed): <u>Revision Spine Surgery</u>. Mosby; St. Louis, Missouri. 1999: pp 201-210.
- 15. Guyer RD, Blumenthal SL: *Preliminary Unites States Experience with the SB Charité III Artificial Discs*. In: Büttner-Janz K, Hochschuler SH, McAfee PC (eds): <u>The Artificial Disc</u>. Springer-Verlag, Berlin, Germany, 2003, pp. 139-145.
- 16. Block AR, Gatchel RJ, Deardorff WW, Guyer RD (Authors): <u>The Psychology of Spine Surgery.</u> Block AR (ed) American Psychological Association, Washington, D.C., 2003.
- 17. Guyer RD, Ohnmeiss DD: *Degenerative Disc Disease: Fusion Cages and Dowels*. In: Herkowitz H, Dvorak J, Bell G, et al (eds): <u>The Lumbar Spine</u>, 3<sup>rd</sup> Edition. Lippincott Williams & Wilkins, Philadelphia, PA, 2004, pp 342-351.
- 18. Henry S, Guyer RD: *Revision Decompressive / Disc Surgery*. In: Frymoyer J et al (ed): <u>The Adult and Pediatric Spine</u>. Lippincott Williams & Wilkins, Philadelphia, PA. 2004; pp 1153-1163.

- 19. Guyer RD, Corbin TP: *Minimally Invasive Posterior Fusion and Internal Fixation with ATAVI System*. In: Kambin P (eds): <u>Arthroscopic and Endoscopic Spinal Surgery; Text & Atlas</u>. Humana Press, Totowa, NJ, 2005; pp 227-238.
- 20. Guyer RD, Zigler JE (Editors): <u>Spinal Arthroplasty: A New Era in Spine Care</u>. Quality Medical Publishing. St. Louis, MO; 2005.
- 21. Guyer RD Burd TA, Hochschuler SH, McAfee PC: *Total Disc Replacement*. In: Guyer RD, Zigler JE (eds): <u>Spinal Arthroplasty: A New Era in Spine Care</u>. Quality Medical Publishers, St. Louis, MO, 2005; pp 181-224.
- 22. Guyer RD: *InFix Interbody Fusion Device*. In: Haid RW Jr, Fessler R, McLaughlin MR (eds) <u>Interbody Fusion Techniques: Cages, Dowels, and Grafts</u>. Quality Medical Publishing, Inc. St. Louis, MO, 2005; pp 133-147.
- 23. McAfee PC, Guyer RD: *CHARITÉ Artificial Disc Replacement*. In: Corbin TP, Connolly PJ, Yuan H, Bao Q-B, Boden SD (eds): <u>Emerging Spine Surgery Technologies: Evidence and Framework for Evaluating New Technology.</u> Quality Medical Publishing, St. Louis, MO, 2005; pp 527-562.
- 24. Johnson MC, Guyer RD: *Revision Strategies: Failed Instrumentation*. In Herkowitz H, Garfin S, Eismont FJ, Bell GR, Balderston RA (eds) <u>The Spine</u> 5<sup>th</sup> Edition, Elsevier, London; 2007.
- 25. Guyer RD, Ohnmeiss DD: *Disc Replacement*. In: Slipman CW, Simeone F, Derby R, Mayer TG (eds): <u>Interventional Spine</u>: An Algorithmic Approach. Saunders Elsevier, Philadelphia, Pennsylvania; 2008; pp. 1389-1396.
- 26. Dickerman RD, Guyer RD: *Intraoperative EMG* Monitoring. In Levine A, Eismont F, Garfin S, Zigler J (Eds): <u>Spine Trauma</u>. Elsevier; London; in press.
- 27. Block AR, Guyer RD: *Chronic Pain Management as an Alternative to Spine Surgery*. In: Schatman M, Campbell A, Loeser JD (eds): <u>Chronic Pain Management: Guidelines for Multidisciplinary Program Development</u>. CRC Press, Boca Raton, Florida; 2007; pp. 65-74.
- 28. Guyer RD: *Impliant TOPS: Total Posterior Element Replacement*. In Szpalski M, Gunzburg R, Le Huec J-C, Brayda-Bruno M (ed): <u>Nonfusion Technologies in Spine Surgery</u>; Lippincott Williams and Wilkins, Philadelphia, 2007, pp. 221-224.
- 29. Guyer RD, Craig L: *U.S. Update of CHARITÉ One Year After FDA Approval*. In Szpalski M, Gunzburg R, Le Huec J-C, Brayda-Bruno M (ed): <u>Nonfusion Technologies in Spine Surgery</u>; Lippincott Williams and Wilkins, Philadelphia, 2007, pp. 151-157.
- 30. Guyer RD, Roybal R: Disc Arthroplasty: *The Charité´ Study-What Does It Really Mean?* In Resnick DK, Wang J, Haid RW (eds): <u>Surgical Management of Low Back Pain</u>, 2<sup>nd</sup> Edition Theime, New York, New York; 2009, pp. 194-200.
- 31. Guyer RD, Block AR: *Multidisciplinary Chronic Pain Management as an Alternative to Surgery*. In: Schatman M (Ed): <u>Multidisciplinary Chronic Pain Management: A Guidebook for Program Development and Excellence of Treatment</u>. Informa Healthcare, New York, in press.

- 32. Guyer RD, Ohnmeiss DD: *Socioeconomic Impact of Motion Preservation Technology*. In Yue, Bertagnoli R, McAfee PC, An H (eds): <u>Motion Preservation Surgery of the Spine</u>: <u>Advanced Techniques and Controversies</u>. Elsevier, Philadelphia, Pennsylvania.
- 33. Guyer RD, Roush TF: *Fusion: Combined Anterior-Posterior Approach*. In: Phillips FM, Lauryssen C (eds): <u>The Lumbar Intervertebral Disc</u>. Thieme Medical; New York, New York; 2010; pp. 241-247.
- 34. Guyer RD, Ohnmeiss DD: *How Disc Replacement Fits in the Treatment Algorithm for Degenerative Disc Disease: Refining Indications for Disc Replacement.* . In: Szpalski M, Gunzburg R, Rydevik, BL, Le Huec J-C, Mayer HM (eds): <u>Surgery for Low Back Pain.</u> Springer, Heidelberg, Germany; 2010; pp 177-182.
- 35. Guyer RD, Ohnmeiss DD: *Prospective Randomized Comparison of Two Lumbar Total Disc Replacements*. In: Szpalski M, Gunzburg R, Rydevik, BL, Le Huec J-C, Mayer HM (eds): <u>Surgery for Low Back Pain.</u> Springer, Heidelberg, Germany; 2010; pp 193-198.
- 36. Guyer RD, Ohnmeiss DD, Strauss KR: *Overview of Pedicle Screw Based Posterior Dynamic Stabilization Systems*. In: Szpalski M, Gunzburg R, Rydevik, BL, Le Huec J-C, Mayer HM (eds): <u>Surgery for Low Back Pain</u>. Springer, Heidelberg, Germany; 2010; pp 221-226.
- 37. Yue JJ, Guyer RD, Johnson JP, Khoo LT, Hochschuler SH (eds): <u>The Comprehensive Treatment of the Aging Spine: Minimally Invasive and Advanced Techniques.</u> Elsevier, Philadelphia, Pennsylvania; 2010.
- 38. Shellock J, Guyer RD: *Lumbar Disc Arthroplasty: Indications and Contraindications*. In: Yue JJ, Guyer RD, Johnson JP, Khoo LT, Hochschuler SH (eds): <u>The Comprehensive Treatment of the Aging Spine: Minimally Invasive and Advanced Techniques</u>. Elsevier, Philadelphia, Pennsylvania; 2010; pp. 366-373.
- 39. Guyer RD, Ohnmeiss DD: *How to Calculate the Cost of Spine Care*. In: Rihn JA, Vaccaro AR, Albert TJ (eds): <u>Defining the Value of Spine Care</u>. Jaypee Brothers Medical Publishers, New Delhi, India; 2012; pp. 109-118.
- 40. Guyer RD, Glenn J: *Anterior Approach to the Lumbar Spine*. In: Herkowitz HN, Garfin SR, Eismont FJ, Bell GR, Balderston RA (eds): <u>Rothman-Simeone: The Spine</u> 6<sup>th</sup> edition. Elsevier; Philadelphia, Pennsylvania; 2011; pp. 919-929.
- 41. Guyer RD, Ohnmeiss DD: *Mini-ALIF: Anterior Lumbar Interbody Fusion*. In Singh K, (eds): <u>Minimally Invasive Spine Surgery: An Algorithmic Approach</u>. Jaypee Brothers Medical Publishers. New Delhi, India; 2013, pp. 44-49.
- 42. Thongtrangan I, Guyer RD: *Lumbar Artificial Disc*. In: Vaccaro AR, Eck JC (eds): Surgical Atlas of Spinal Operations. Jaypee Brothers Medical Publishers, New Delhi, India; 2013, pp. 374-384.
- 43. Morrison T, Guyer RD, Ohnmeiss DD: *Complications of Cervical Disc Replacement*. In: Kim D, Sengupta DK, Cammisa FP, Yoon KJ, Fessler RG (eds): <u>Dynamic Reconstruction of the Spine</u> 2<sup>nd</sup> Edition. Thieme Medical Publishers, New York, New York, 2015; pp. 175-161.

- 44. Guyer RD, Otero-Lopez E: *Lumbar Total Disc Arthroplasty*. In: Steinmetz MP, Benzel EC (eds): <u>Benzel's Spine Surgery</u>, 4<sup>th</sup> Edition. Elsevier Clinical Solutions, Philadelphia, Pennsylvania, 2017; pp. 1591-1596.
- 45. Ilalov K, Guyer RD, Zigler JE, Ohnmeiss DD: *Clinical Results of Total Lumbar Disc Replacement, Including Update of IDE Trials*. In: Kim D, Sengupta DK, Cammisa FP, Yoon KJ, Fessler RG (eds): <u>Dynamic Reconstruction of the Spine</u> 2<sup>nd</sup> Edition. Thieme Medical Publishers, New York, New York, 2015; pp. 367-373.
- 46. Guyer RD, Hancock CW: *Axial Pain and Lumbar Degenerative Disc Disease*. In: Trummees E, Prather H (eds): Orthopaedic Knowledge Update, 5<sup>th</sup> Edition. American Academy of Orthopaedic Surgeons. Rosemont, Illinois; 2017, pp. 265-282.
- 47. Johnson R, Guyer RD: *Anterior Lumbar and Spine Surgical Approaches*. In: Garfin SR, Bell G, Eismont F, Bono C, Fischgrund J (eds): <u>Rothman-Simeone: The Spine</u> 7<sup>th</sup> Edition. Elsevier, Philadelphia, Pennsylvania, 2018; pp. 873-890.
- 48. Guyer RD, Thongtrangan I: *Anterior Lumbar Arthroplasty*. In: Vaccaro AR, Eck JC (eds): Surgical Atlas of Spinal Operations, 2<sup>nd</sup> Edition. Jaypee Brothers Medical Publishers, New Delhi, India; 2020; pp: 331-340.
- 49. Satin AM, Derman PB, Guyer RD: *Lumbar Total Disc Arthroplasty*. In: Steinmetz N, Berven SH, Benzel EC (eds): <u>Benzel's Spine Surgery: Techniques, Complication Avoidance, and Management, 5<sup>th</sup> Edition.</u> Elsevier, Philadelphia, Pennsylvania, 2022; pp. 1088-1098.
- 50. Guyer RD, Webb AJ: Surgical Management of Degenerative Spine Disorders: Axial Pain and Lumbar Degenerative Disk Disease. In: Trummees E, Prather H (eds): Orthopaedic Knowledge Update, 6<sup>th</sup> Edition. American Academy of Orthopaedic Surgeons. Rosemont, Illinois, 2022; pp. 267-278.
- 51. Guyer RD, Barnes DG: *Lumbar Disc Arthroplasty*. In: Zdeblick T, Albert T (eds): <u>Master Techniques in Orthopaedic Surgery: The Spine, 4<sup>th</sup> Edition</u>. Walters Kluwer, 2023; pp. 361-372.
- 52. Cox JT, Guyer RD: *Cervical Disc Arthroplasty*. In: Itshayek I (ed): <u>Nontraumatic Cervical Myelopathy</u>: <u>Pathologies</u>, <u>Surgical Techniques</u>, and <u>Nuances</u>. Nova Science Publishers, 2020.; pp. 599-618.
- 53. Derman PB, Zigler J, Guyer R, Blumenthal S, Lieberman IH: *Lumbar Disc Arthroplasty*. In: Winn HR, ed. <u>Youmans and Winn Neurological Surgery 8<sup>th</sup> ed</u>. Philadelphia, PA: Elsevier; 2022; pp. 2788-2793.
- 54. Satin AM, Derman PB, Guyer RD: *Lumbar Total Disc Arthroplasty*. In: Steinmetz N, Berven SH, Benzel EC (eds): <u>Benzel's Spine Surgery: Techniques, Complication Avoidance, and Management, 6<sup>th</sup> Edition.</u> Elsevier, Philadelphia, Pennsylvania, in press.

## **PRESENTATIONS**

1. Guyer RD: Pulmonary Embolism Prophylaxis in Total Hip Patients. Alumni Day, University of Pennsylvania, Department of Orthopedic Surgery. May, 1979; Philadelphia, Pennsylvania.

2. Guyer RD: Orthopedic Conferences at the University of Pennsylvania: Philadelphia, Pennsylvania.

Metabolic Bone Disease, November, 1978

Brachial Plexus Injuries, January, 1978

Biomechanics of the Hip, September, 1978

Review of Metabolic Bone Disease, November, 1978

Acute Arthritis of the Knee, January, 1979

Fractures of the Thoracolumbar Spine, March, 1979

- 3. Guyer RD: Biophysical Augmentation of Fracture Healing with Electricity. Grand Rounds, The University of Texas Medical School at Houston. December, 1979; Houston, Texas.
- 4. Guyer RD: Simplified Radiographic Examination for Dislocated Shoulders. Alumni Day, University of Pennsylvania. May, 1980; Philadelphia, Pennsylvania.
- 5. Guyer RD: Orthopedic Management of Hemophilia. Perspectives in Management of Hemophilia. October, 1980.
- 6. Guyer RD: Electrical Stimulation of the Bone for the Treatment of Nonunion. Edward T. Smith Lectureship. November, 1980.
- 7. Guyer RD: Complication of Closed Intramedullary Rodding of Proximal Femoral Shaft. Western Orthopedic Association. October, 1981.
- 8. Wiltse LL, Glenn W, Spencer CW, Porter IS, Guyer RD: Alar Transverse Process Impingement of L5 Nerve Root or the Far-Out Syndrome. International Lumbar Spine Society Meeting. June, 1982; Toronto, Canada.
- 9. Guyer RD: Nerve Impingement Syndromes of the Lumbar Spine. Orthopedic Grand Rounds Southwestern School of Medicine, Division of Orthopedic Surgery. September, 1982; Dallas, Texas.
- 10. Guyer RD: Orthopedic Injuries to the Extremities. Texas Trial Lawyers Association. March, 1984; Dallas, Texas.
- 11. Guyer RD: Spinal Disorders Neck and Back. Orthopedic Surgery Lecture, Introduction to Disease Course, Southwestern Medical School. April, 1984; Dallas, Texas.
- 12. Guyer RD: Management of Chymopapain Failures. Western Orthopedic Association, September, 1984; Forth Worth, Texas.
- 13. Guyer RD: Treatment of Low Back Pain. Kaufman County Medical Society. November, 1985; Terrell, Texas.
- 14. Sachs BL, Spivey MA, Guyer RD, Johnson RG, Rashbaum RF, Hochschuler SH, Vanharanta H, Aprill C, Terry A, Selby D, Mooney V: Dallas Discogram Description: A New Classification of CT/Discography. International Society for the Study of Lumbar Spine. June, 1986; Dallas, Texas.
- 15. Sachs BL, Spivey MA, Guyer RD, Johnson RG, Rashbaum RF, Hochschuler SH, Vanharanta H, Aprill C, Terry A, Selby D, Mooney V: A Clinical Grading System of

- CT/Discography for Diagnostic Value in Low Back Problems. International Society for the Study of Lumbar Spine. June, 1986; Dallas, Texas.
- 16. Vanharanta H, Sachs BL, Spivey MA, Hochschuler SH, Guyer RD, Rashbaum RF, Johnson R: Disc Degeneration and Leaking of Annulus in Reproduction of Back Pain During Discography, a CT/Discographic Study. International Society for the Study of Lumbar Spine. June, 1986; Dallas, Texas.
- 17. Sachs BL, Spivey MA, Guyer RD, Johnson RG, Rashbaum RF, Hochschuler SH, Vanharanta H, Aprill C, Terry A, Selby D, Mooney V: Dallas Discogram Description: A New Classification of CT/Discography. North American Spine Society. July, 1986; Bolton Landing, New York.
- 18. Vanharanta H, Sachs BL, Spivey MA, Hochschuler SH, Guyer RD, Rashbaum RF, Johnson R: Disc Degeneration and Leaking of Annulus in Reproduction of Back Pain During Discography, a CT/Discography Study. North American Spine Society. July, 1986; Bolton Landing, New York.
- 19. Guyer RD: Discography and CT/Discography. Clinical Orthopedic Society. October, 1986; Forth Worth, Texas.
- 20. Guyer RD: The Far-Out Syndrome. The John Hopkins University Lectureship. November, 1986.
- 21. Sachs BL, Spivey MA, Guyer RD, Johnson RG, Rashbaum RF, Hochschuler SH, Vanharanta H, Aprill C, Terry A, Selby D, Mooney V: A Clinical Grading System of CT/Discography for Diagnostic Values in Low Back Problems. Federation of Spine Associations, January 1987, San Francisco, California.
- 22. Loguidice VA, Guyer RD, Johnson RG, Rashbaum RF, Hochschuler SH: Anterior Lumbar Interbody Fusions. Texas Medical Association. May, 1987; Houston, Texas.
- 23. Sachs BL, Vanharanta H, Spivey MA, Guyer RD, Hochschuler SH, Rashbaum RF: Technique of CT/Discography. International Society for the Study of the Lumbar Spine. May, 1987; Rome, Italy.
- 24. Loguidice VA, Guyer RD, Johnson RG, Rashbaum RF, Hochschuler SH, Stith WJ, Ohnmeiss DD: Anterior Lumbar Interbody Fusions. North American Spine Society. June, 1987; Banff, Canada.
- 25. Guyer RD, Collier R, Rashbaum RF, Hochschuler SH, Stith WJ, Ohnmeiss DD, Loguidice VA: Extraosseous Spinal Lesions Mimicking Disc Disease. North American Spine Society. June, 1987; Banff, Canada.
- 26. Vanharanta H, Sachs BL, Spivey M, Rashbaum RF, Guyer RD, Hochschuler SH, Ohnmeiss DD, Johnson RG, Mooney V: Comparison of Disc Narrowing with Discographic Degenerative Changes and Pain Provocation. North American Spine Society. June, 1987; Banff, Canada.
- 27. Hochschuler SH, Rashbaum RF, Guyer RD, Stith WJ, Ohnmeiss DD: Proplast Reconstruction of Iliac Crest Defects. North American Spine Society. June, 1987; Banff, Canada.

- 28. Guyer RD: Intra-Spinal Tumors Mimicking Herniated Disc Disease. Western Orthopaedic Association Meeting. September, 1987; Dallas, Texas.
- 29. Guyer RD: Extraosseous Spinal Lesions Mimicking HNP. Grand Rounds, University of Texas Health Science Center, Southwestern Medical School. March, 1988; Dallas, Texas.
- 30. Guyer RD, Collier R, Hochschuler SH, Rashbaum RF, Regan JJ, Stith WJ, Ohnmeiss DD: Post-discography Discitis. International Society for the Study of the Lumbar Spine. April, 1988; Bal Harbour, Florida.
- 31. Vanharanta H, Sachs BL, Spivey M, Aprill C, Ohnmeiss DD, Guyer RD, Rashbaum RF, Hochschuler SH, 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.
- 32. Lonstein MA, Johnson R, Guyer RD: Posterior Lumbar Fusion and Instrumentation. Texas Medical Association. May, 1988; San Antonio, Texas.
- 33. Hopp S, Johnson R, Guyer RD: Microscopic Discectomy and Fusion for Cervical Syndrome. Texas Medical Association. May, 1988; San Antonio, Texas.
- 34. Vanharanta H, Sachs BL, Spivey M, Aprill C, Ohnmeiss DD, Guyer RD, Rashbaum RF, Hochschuler SH, Stith WJ, Mooney V: Disc Deterioration in Low Back Syndromes: A Prospective Multi-center CT/Discography Study. North American Spine Society. July, 1988; Colorado Springs, Colorado.
- 35. Vanharanta H, Ohnmeiss DD, Stith WJ, Regan JJ, Hochschuler SH, Guyer RD, Mooney V: The Effect of Repeated Trunk Extension and Flexion Movements as Seen By CT/Discography. North American Spine Society. July, 1988; Colorado Springs, Colorado.
- 36. Guyer RD, Collier R, Hochschuler SH, Rashbaum RF, Regan JJ, Stith WJ, Ohnmeiss DD: Post-discography Discitis. North American Spine Society. July, 1988; Colorado Springs, Colorado.
- 37. 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. North American Spine Society. July, 1988; Colorado Springs, Colorado.
- 38. Guyer RD: Symptoms and Pathogenesis of Lumbar Herniated Disc. Automated Percutaneous Discectomy Workshop, Division of Orthopaedic Surgery, University of Texas Southwestern Medical School. November, 1988; Dallas, Texas.
- 39. Vanharanta H, Ohnmeiss DD, Stith WJ, Regan JJ, Hochschuler SH, Guyer RD, Mooney V: Effect of Repeated Trunk Extension and Flexion Movements as Seen by CT/Discography. Federation of Spine Associations. February, 1989; Las Vegas, Nevada.
- 40. Vanharanta H, Ohnmeiss DD, Stith WJ, Guyer RD, Hochschuler SH, Rashbaum RF, Sachs BL: The Effect of Lumbar Level in Painful Disc Deterioration. International Society for the Study of the Lumbar Spine. May, 1989; Kyoto, Japan.
- 41. Guyer RD: Evaluation and Management of Lumbar Disc Disease. American Academy of Pain Medicine. November, 1989; Dallas, Texas.

- 42. Guyer RD: Injection Techniques. Keystone Spine Meeting. March, 1990; Keystone, Colorado.
- 43. Guyer RD: Post-op Care. Keystone Spine Meeting. March, 1990; Keystone, Colorado.
- 44. Guyer RD: Spinal Surgery. Resident Teaching Conference. April, 1990; Dallas, Texas.
- 45. Guyer RD: State of the Art Diagnostic Techniques for the Lumbar Spine. American Bar Association Work Place Remedies II. May, 1990; Dallas, Texas.
- 46. Guyer RD: Evaluation of Low Back Pain. Texas College of Osteopathic Medicine. May, 1990; Fort Worth, Texas.
- 47. 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.
- 48. Guyer RD: Arthroscopic Microdiscectomy. North American Spine Society Instructional Course. August, 1990; Monterey, California.
- 49. Guyer RD: Selective Discography, Discography, and Pain Provocation. Arthroscopic Microdiscectomy Course. November, 1990; Philadelphia, Pennsylvania.
- 50. Hochschuler SH, Guyer RD, Ohnmeiss DD, Stith WJ, Rashbaum RF, Regan JJ: The Use of Donor Femur Grafts in Anterior Lumbar Interbody Fusion. American Academy of Orthopaedic Surgeons. March, 1991; Anaheim, California.
- 51. 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. Federation of Spine Associations. March, 1991; Anaheim, California.
- 52. 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. Mid-American Orthopaedic Association. April, 1991; Palm Springs, California.
- 53. Guyer RD, Ohnmeiss DD, Stith WJ, Hochschuler SH, Rashbaum RF, Regan JJ: Comparison of Single Level Arthroscopic Microdiscectomy to Laminectomy and Discectomy. International Intradiscal Therapy Society. April, 1991; Houston, Texas.
- 54. Guyer RD: Metabolic Bone Disease. University of Texas Southwestern Medical School; Orthopaedic Board Examination Review Course. April, 1991; Dallas, Texas.
- 55. Herbert M, Pepper J, Guyer RD: Changes in Intervertebral Disc Pressure with Flexion After L5-S1 Posterior Instrumentation. International Society for the Study of the Lumbar Spine. May, 1991; Heidelberg, Germany.
- 56. 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.
- 57. 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.

- 58. Guyer RD: Comparison of Costs and Effectiveness of Arthroscopic Microdiscectomy to Laminectomy with Discectomy. North American Spine Society. August, 1991; Keystone, Colorado.
- 59. 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.
- 60. 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.
- 61. Hochschuler SH, Guyer RD, Ohnmeiss DD, Rashbaum RF, Regan JJ: Single-level Stabilization with Femur Grafts. North American Spine Society. August, 1991; Keystone, Colorado.
- 62. Regan JJ, Shelokov AP, Guyer RD, Hochschuler SH, Rashbaum RF: Use of the Texas Scottish Rite Hospital System Anteriorly in Adult Scoliosis. North American Spine Society. August, 1991; Keystone Colorado.
- 63. Regan JJ, Mack M, Shelokov AP, Guyer RD, Hochschuler SH, Rashbaum RF: Thoroscopy in the Diagnosis and Treatment of Lesions in the Dorsal Spine. North American Spine Society. August, 1991; Keystone Colorado.
- 64. Guyer RD: Mechanisms of Pain Relief with Arthroscopic Microdiscectomy. International Society for Minimally Invasive Spine Surgery. November, 1991; Philadelphia, Pennsylvania.
- 65. 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. Federation of Spine Associations. February, 1992; Washington, D.C.
- 66. Regan JJ, Shelokov AP, Guyer RD, Hochschuler SH, Rashbaum RF: Use of the Texas Scottish Rite Hospital System Anteriorly in Adult Scoliosis. American Academy of Orthopaedic Surgeons. February, 1992; Washington, D.C.
- 67. Regan JJ, Shelokov AP, Alfano S, Guyer RD, Hochschuler SH, Rashbaum RF: Use of the Texas Scottish Rite Hospital System Anteriorly in Adult Scoliosis. Scoliosis Research Society/North American Spine Society joint conference on Pedicle Fixation of the Lumbar Spine. April, 1992; Phoenix, Arizona.
- 68. Guyer RD: Metabolic Bone Disease. University of Texas Southwestern Medical School; Orthopaedic Board Examination Review Course. June, 1992; Dallas, Texas.
- 69. Floyd T, Hochschuler SH, Vanharanta H, Ohnmeiss DD, Guyer RD: The Relationship of Facet Tropism to Degenerative Disc Disease. North American Spine Society. July, 1992; Boston, Massachusetts.
- 70. 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.

- 71. Floyd T, Vanharanta H, Ohnmeiss DD, Guyer RD, Hochschuler SH: The Relationship of Facet Tropism to Degenerative Disc Disease. Schriners Residents and Fellows Conference. November, 1992; New Orleans, Louisiana.
- 72. Block A, Guyer RD, Hochschuler SH, Ohnmeiss DD, Vanharanta H: Discographic Pain Report: Influence of Psychological Factors. American Academy of Orthopaedic Surgeons. February, 1993; San Francisco, California.
- 73. Guyer RD: Discordant CT/Discography Results: Psychological Factors Play a Role. International Society for the Study of the Lumbar Spine. June, 1993; Marseilles, France.
- 74. Rashbaum RF, Ohnmeiss DD, Bogdanffy GM, Guyer RD: Prospective Outcome Evaluation of Spinal Cord Stimulation for Intractable Leg Pain. International Society for the Study of the Lumbar Spine. June, 1993; Marseilles, France.
- 75. Block AR, Vanharanta H, Ohnmeiss DD, Guyer RD, Hochschuler SH: Discordant CT/Discography Results: Psychological Factors Play a Role. International Society for the Study of the Lumbar Spine. June, 1993; Marseilles, France.
- 76. Perim D, Guyer RD, Elliott FT: Lumbar Laminectomy-Discectomy: Factors Associated with Increased Costs and Morbidity. International Society for the Study of the Lumbar Spine. June, 1993; Marseilles, France.
- 77. Bogdanffy GM, Ohnmeiss DD, Griffith SL, Guyer RD: Relationship and Reliability of Ultrasound and Dual Energy X-Ray Absorptiometry (DXA) for the Assessment of Bone. American Society for Bone and Mineral Research. September, 1993; Tampa, Florida.
- 78. Ohnmeiss DD, Hochschuler SH, Guyer RD, Weinhoffer SL: Laser Disc Decompression: The Importance of Proper Patient Selection. North American Spine Society. October, 1993; San Diego, California.
- 79. Weinhoffer SL, Guyer RD, Herbert M, Griffith SL, Ohnmeiss DD: In Vitro Intradiscal Pressure Measurements above a Simulated Fusion. North American Spine Society. October, 1993; San Diego, California.
- 80. Rashbaum RF, Ohnmeiss DD, Bogdanffy GM, Guyer RD: Prospective Outcome Evaluation of Spinal Cord Stimulation for Intractable Leg Pain. North American Spine Society. October, 1993; San Diego, California.
- 81. Regan JJ, Mack M, Picetti GD III, Guyer RD, Hochschuler SH, Rashbaum RF: A Comparison of Video-assisted Thoracoscopic (VAT) to Open Thoracotomy in Thoracic Spinal Surgery. North American Spine Society. October, 1993; San Diego, California.
- 82. Ohnmeiss DD, Hochschuler SH, Guyer RD, Weinhoffer SL: Laser Disc Decompression: The Importance of Proper Patient Selection. Federation of Spine Associations. February, 1994; New Orleans, Louisiana.
- 83. Guyer RD: Metabolic Bone Disease. University of Texas Southwestern Medical School; Orthopaedic Board Examination Review Course. May, 1994; Dallas, Texas.
- 84. Ohnmeiss DD, Vanharanta H, Guyer RD, Hochschuler SH: The Relationship between Pain Drawings and Discographic Pain Responses. International Society for the Study of the Lumbar Spine. June, 1994; Seattle, Washington.

- 85. Guyer RD, Ruoff M, Ohnmeiss DD: Combined Anterior-posterior Lumbar Spinal Fusion: Is it Safe? North American Spine Society; October, 1994; Minneapolis, Minnesota.
- 86. Vanharanta H, Ohnmeiss DD, Guyer RD: Are Lumbar Flexion-Extension Films Useful in Identifying Discogenic Pain? North American Spine Society; October, 1994; Minneapolis, Minnesota.
- 87. Novotny SR, Guyer RD, Regan JJ, Ohnmeiss DD: Laparoscopic Assisted Anterior Lumbar Interbody Fusion. North American Spine Society; October, 1994; Minneapolis, Minnesota.
- 88. Novonty SR, Guyer RD, Regan JJ: Laparoscopic Assisted Anterior Lumbar Interbody Fusion. American Academy of Orthopaedic Surgeons. February, 1995; Orlando, Florida.
- 89. Blumenthal SL, Regan JJ, Guyer RD, Novotny S, Ohnmeiss DD: Laparoscopic Assisted Anterior Lumbar Interbody Fusion. International Society for the Study of the Lumbar Spine. June, 1995; Helsinki, Finland.
- 90. Guyer RD: The Myths of Spine Surgery. Neuroscience. August, 1995; Plano, Texas.
- 91. Guyer RD, Ohnmeiss DD, Mason SL, Shelokov AP: The Relationship of Cervical Discographic Pain Responses and Radiographic Images. North American Spine Society. October, 1995; Washington, D.C.
- 92. Mason SL, Shelokov AP, Guyer RD, Ohnmeiss DD: Complications of Cervical Discography: Findings in a Large Series. North American Spine Society. October, 1995; Washington, D.C.
- 93. Bogdanffy GM, Kime C, Guyer RD: Percutaneous Lumbar Discectomy: A Comparison of Two Nuclear Aspiration Systems *In Vitro*. North American Spine Society. October, 1995; Washington, D.C.
- 94. Mason SL, Shelokov AP, Guyer RD, Ohnmeiss DD: Complications of Cervical Discography: Findings in a Large Series. American Academy of Orthopaedic Surgeons. February, 1996; Atlanta, Georgia.
- 95. Guyer RD: Mini Open Spinal Fusion. New Frontiers in Spine Surgery. April, 1996; Strasbourg, France.
- 96. Gronblad M, Virri J, Ronkko S, Kiviranta I, Vanharanta H, Seitsalo S, Rashbaum RF, Guyer RD: 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. (Volvo Award Winning Paper) International Society for the Study of the Lumbar Spine. June, 1996; Burlington, Vermont.
- 97. Block AR, Ware D, Ohnmeiss DD, Guyer RD, Pladjewitz C: Initial Results from a Psycho-Social Screening Package for Spine Surgery Candidates. International Society for the Study of the Lumbar Spine. June, 1996; Burlington, Vermont.
- 98. Guyer RD, Ohnmeiss DD, Vanharanta H, Mason SL: Are Results of Lumbar and Cervical Discography Similar? Spine Across the Sea (NASS/JSRS). March, 1997; Hawaii.
- 99. Guyer RD: Reimbursement: Marketing vs. Survival. American Pain Society/North American Spine Society. April, 1998; Charleston, South Carolina.

- 100. Massoud B, Ohnmeiss DD, Rinn C, Guyer RD, Hochschuler SH, Rashbaum RF, Blumenthal SL, Zigler JE, Regan JJ, Fulp T: Results of Hardware Removal in the Lumbar Spine and the Role of Diagnostic Hardware Injection. Dialogue and Controversy in Spinal Surgery. April, 1998; Stove Mountain, Georgia.
- 101. Guyer RD: Postero-Lateral Fusion: Indications & Technique. Complications in Spinal Fusion. March, 1999; Olympic Valley, California.
- 102. Simpson NS, Blumenthal SL, Guyer RD, Ohnmeiss DD, Risk DE: Anterior Lumbar Interbody Fusion with Threaded Fusion Cages: Technique, Feasibility, and Safety. American Spinal Injury Association. April, 1999; Atlanta, Georgia.
- 103. Guyer RD: Minimally Invasive Spine Surgery. American Academy of Orthopaedic Surgeons Practical Anatomy and Surgery Technique Workshop. April, 1999; St. Louis, Missouri.
- 104. Guyer RD: Degenerative Lumbar Spondylolisthesis. Clinical Lecture. University of Texas Southwestern Medical Center. May, 1999; Dallas, Texas.
- 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 21<sup>st</sup> Century Symposium. May, 1999; Dallas, Texas.
- 107. Sengupta D, Ohnmeiss DD, Mulholland R, Webb J, Guyer RD, Zigler JE, Hochschuler SH: Fulcrum Assisted Soft Stabilization (FASS) in the Treatment of Activity Related Low Back Pain A New Concept. International Society for the Study of the Lumbar Spine. June, 1999; Kona, Hawaii.
- 108. Guyer RD, Goodwin C, Ohnmeiss DD, Guthner D: Capacitively Coupled stimulation for Lumbar Spine Fusion: Clinical Improvement Analysis from a Randomized Double-Blind Trial. International Society for the Study of the Lumbar Spine. June, 1999; Kona, Hawaii.
- 109. Block AR, Guyer RD, Rashbaum RF, Hochschuler SH, Ohnmeiss DD: Use of Presurgical Psychosocial Screening to Predict Spine Surgery Outcome. North American Spine Society. October, 1999; Chicago, Illinois.
- Guyer RD: Lumbar Discography: Indications and Efficacy. Symposium on Lumbar Discogenic Disease - American Academy of Orthopaedic Surgeons. March, 2000; Orlando, Florida.
- 111. Guyer RD: Lumbar Interbody Fusion Cages in the Management of Chronic Low Back Pain. JPSSSTS Conference. September, 2000; Tokyo, Japan.
- 112. Regan JJ, Ohnmeiss DD, Hochschuler SH, Blumenthal SL, Guyer RD: Comparison of Laparoscopic to Mini-Open Fusion at the L4-5 Level. North American Spine Society. October, 2000; New Orleans, Louisiana.
- 113. Corbin T, Guyer RD, Ohnmeiss DD: Outcomes of Spinal Fusion Supplemented with Capacitively Coupled Electrical Stimulation. North American Spine Society. October, 2000; New Orleans, Louisiana.

- 114. Blumenthal SL, McAfee PC, Hochschuler SH, Guyer RD, Fedder I, Ohnmeiss DD: Prospective Evaluation of the SB Charité III Disc Prosthesis. Spine Society of Australia. April, 2001; Australia.
- 115. Burton DC, Ohnmeiss DD, Zigler JE, Blumenthal SL, Rashbaum RF, Guyer RD, Regan JJ: Anterior Cervical Discectomy and Fusion with Allograft Bone and Plate Fixation. American Spinal Injury Association. May, 2001; Long Beach, California.
- 116. Hisey MS, Bash J, Ohnmeiss DD, Zigler JE, Guyer RD, Blumenthal SL, Regan JJ, Hochschuler SH, Rashbaum RF: Is There an Association Between Using ADCON-L<sup>TM</sup> and the Incidence of Recurrent Disc Herniation? American Spinal Injury Association. May, 2001; Long Beach, California.
- 117. Guyer RD: General Indications and Contraindications for Disc Replacement (Symposium: Artificial Intervertebral Discs and Beyond). North American Spine Society. November, 2001; Seattle, Washington.
- 118. Guyer RD: Early US Experience with the Charité Artificial Disc. (Symposium) American Academy of Orthopaedic Surgeons. February, 2002; Dallas, Texas.
- 119. Blumenthal SL, Guyer RD, Hochschuler SH, Ohnmeiss DD: Preliminary Results of a Prospective Study Using the SB Charité III Disc Prosthesis. Spine Society of Australia. April, 2002; Melbourne, Australia.
- 120. Ohnmeiss DD, Guyer RD, Hochschuler SH, Rashbaum RF, Blumenthal SL, Zigler JE: Influence of Scan Projection on the Diagnosis of Osteoporosis in a Low Back Pain Population. Meeting of the Americas. April, 2002; New York, New York.
- 121. Henry S, Ohnmeiss DD, Guyer RD, Zigler JE, Chang Y, Rashbaum RF, Blumenthal SL: Outcome of Anterior Cervical Fusion for Discographically Proven Pain. Meeting of the Americas. April, 2002; New York, New York.
- 122. Guyer RD, Blumenthal SL, Hochschuler SH, Ohnmeiss DD: US Experience with the SB Charité Artificial Disc. Spinal Arthroplasty Society. May, 2002; Montpellier, France.
- 123. Guyer RD: The Multidisciplinary Approach to Work Comp Injuries. Spine Care of the Injured Worker conference. June, 2002; Plano, Texas.
- 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.

- 130. Guyer RD, Blumenthal SL, Hochschuler SH, Ohnmeiss DD: Prospective outcome evaluation of a Total Disc Replacement. Spine Society of Australia. April, 2003; Canberra, Australia.
- 131. Guyer RD: The Role of ALIF. Spinal Arthroplasty Society, May, 2003; Phoenix, Arizona.
- 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.
- 136. Guyer RD: Vertebroplasty. Brazilian Spine Society. June, 2003; Fortaleza, Brazil.
- 137. Guyer RD, Davis R, Songer M, Frederickson B: The Efficacy of a New Modular Cage for Anterior Lumbar Interbody Fusion. International Meeting on Advanced Spinal Techniques (IMAST), July, 2003; Rome, Italy.
- 138. Guyer RD, Blumenthal SL, Hochschuler SH, Ohnmeiss DD: Prospective Outcome Evaluation of a Total Disc Replacement. Spine Across the Sea. July, 2003; Maui, Hawaii.
- 139. Guyer RD, Blumenthal SL, Hochschuler SH, Ohnmeiss DD: Preliminary Experience with the SB Charité III Disc Prosthesis. World Spine. August 2003; Chicago, Illinois.
- 140. Guyer RD, Davis R, Songer M, Frederickson B: The Efficacy of a New Modular Cage for Anterior Lumbar Interbody Fusion. World Spine. August 2003; Chicago, Illinois.
- 141. Guyer RD, Davis R, Songer M, Frederickson B: The Efficacy of a New Modular Cage for Anterior Lumbar Interbody Fusion. North American Spine Society. October, 2003; San Diego, California.
- 142. Guyer RD, Hochschuler SH, Ohnmeiss DD, Blumenthal SL: Prospective Outcome Evaluation of Total Disc Replacement: A 12- to 24-Month Follow-Up Study. North American Spine Society. October, 2003; San Diego, California.
- 143. Guyer RD: SB Charité III Prospective Randomized U.S. Trial (Pre-course: Artificial Discs) North American Spine Society. October, 2003; San Diego, California.
- 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.
- 147. Guyer RD: Preliminary results of the prospective randomized FDA Study Comparing Fusion Versus SB Charité Total Disc Arthroplasty. Non-Fusion Technology "A State of The Art Debate". December, 2003; New York, New York/Zurich, Switzerland.

- 148. Guyer RD, Hochschuler SH, Blumenthal SL, Ohnmeiss DD: Prospective Outcome Evaluation of Total Disc Replacement. American Academy of Orthopaedic Surgeons. March, 2004; San Francisco, California.
- 149. Geisler FH, Blumenthal SL, McAfee PC, Guyer RD, Hochschuler SH, Garcia R, Regan JJ: Prospective, Randomized, Multicenter Trial of Artificial Disc vs. Fusion for Single Level Lumbar Degenerative Disc Disease: A 2-Year Follow-up IDE Study. Congress of Neurological Surgeons. October, 2004; San Francisco, California.
- 150. McAfee PC, Cunningham BW, Holtsapple G, Bussard K, Guyer R, Blumenthal S, Dmitriev A, Maxwell JH, Isaza J, Regan J: A Prospective Randomized U.S. FDA Study of the Charité Disc Replacement A Radiographic Outcome Analysis of 276 Consecutive Patients. Spine Society of Australia. April, 2004; Coolum, Australia.
- 151. Blumenthal S, McAfee P, Guyer R, Hochschuler S, Garcia R, Regan J, Ohnmeiss D: Randomized Control Trial of the Charité Artificial Disc vs. Fusion for Single Level Lumbar Degenerative Disc Disease: A Two-Year Follow-up Study. Spinal Arthroplasty Society. May, 2004; Vienna, Austria.
- 152. Blumenthal SL, Sohn JM, Guyer RD, Hochschuler SH, Ohnmeiss DD: Range of Motion Analysis of the Lumbar Spine after Total Disc Replacement: A Prospective Two-Year Follow-Up Study. Spinal Arthroplasty Society. May, 2004; Vienna, Austria.
- 153. Hochschuler SH, Whitaker C, Zigler JE, Guyer RD, Sachs BL, Blumenthal SL, Rashbaum RF, Ohnmeiss DD: Comparison of Return to Work Following Total Disc Arthroplasty vs. Fusion: A Prospective, Randomized Study. Spinal Arthroplasty Society. May, 2004; Vienna, Austria.
- 154. Sachs BL, Gottlieb J, Guyer RD, Zigler JE, Rashbaum RF, Hochschuler SH, Blumenthal SL, Whitaker C, Ohnmeiss DD: Comparison of Complications Associated with Total Disc Replacement versus Lumbar Fusion at Two-year Follow-Up. Spinal Arthroplasty Society. May, 2004; Vienna, Austria.
- 155. Guyer RD: Static Stabilization, Arthrodesis. What are the results as they compare to Arthroplasty? North American Spine Society symposium at the Spinal Arthroplasty Society. May, 2004; Vienna, Austria.
- 156. Guyer RD: Motion Preservation Systems: Tips on Matching the Right Device to the Right Patient. Impliant workshop at the Spinal Arthroplasty Society. Austria May, 2004; Vienna, Austria.
- 157. Guyer RD: Role of Lumbar Discography in the Pre-Op evaluation prior to Motion Sparing Surgery. North American Spine Society symposium at the Spinal Arthroplasty Society. May, 2004; Vienna, Austria.
- 158. Guyer RD: Range of Motion Analysis of the Lumbar Spine after Total Disc Replacement: A Prospective Two-Year Follow-Up Study. Spine Arthroplasty Society. May, 2004; Vienna, Austria.
- 159. Guyer RD: Principles of Dynamic Stabilization with Special Reference to the Posterior Column. 4<sup>th</sup> Dynesys Meeting. May, 2004; Vienna, Austria.

- 160. McAfee PC, Cunningham BW, Holtsapple G, Bussard K, Guyer R, Blumenthal S, Dmitriev A, Maxwell JH, Isaza J, Regan J: A Prospective Randomized U.S. FDA Study of the Charité Disc Replacement A Radiographic Outcome Analysis of 276 Consecutive Patients. International Society for the Study of the Lumbar Spine. June, 2004; Porto, Portugal.
- 161. Guyer RD: Results of Charité Total Disc Replacement: Historical. Curso Internacional Chileno Norteamericano de Columna Vertebral. August, 2004; Santiago, Chile.
- 162. Guyer RD: History of Total Lumbar Disc Replacement. Curso Internacional Chileno Norteamericano de Columna Vertebral. August, 2004; Santiago, Chile.
- 163. Guyer RD: The Role of ALIF. Curso Internacional Chileno Norteamericano de Columna Vertebral. August, 2004; Santiago, Chile.
- 164. Guyer RD: Clinical and Radiological Diagnostics for Spinal Motion Abnormalities. Curso Internacional Chileno Norteamericano de Columna Vertebral. August, 2004; Santiago, Chile.
- 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.
- 167. Guyer RD: Unconstrained Lumbar Disc Prosthesis Long Term Follow-up. Nonfusion Techniques in Spinal Surgery. September, 2004; Milan, Italy.
- 168. Geisler FH, Blumenthal SL, McAfee PC, Guyer RD, Hochschuler SH, Garcia R, Regan JJ: Prospective, Randomized, Multicenter Trial of Artificial Disc vs. Fusion for Single Level Lumbar Degenerative Disc Disease: A 2-Year Follow-up IDE Study. Congress of Neurological Surgeons. 2004; San Francisco, California.
- 169. Blumenthal S, McAfee P, Guyer RD, Hochschuler S, Garcia R, Regan J, Ohnmeiss D: Prospective, Randomized, Multicenter Comparison of Artificial Disc vs. Fusion for Single Level Lumbar Degenerative Disc Disease: A Two-Year Follow-up Study. North American Spine Society. October, 2004; Chicago, Illinois.
- 170. McAfee P, Cunningham BW, Holtsapple G, Bussard K, Guyer R, Blumenthal S, Dmitriev A, Maxwell J, Isaza J, Regan J: A Prospective Randomized FDA Study of the Charité Disc Replacement A Radiographic Outcome Analysis of 276 Consecutive Patients. North American Spine Society. October, 2004; Chicago, Illinois.
- 171. Ohnmeiss DD, Guyer RD: 24-month Follow-up for Reporting Results of Spinal Implant Studies: Is This Guideline Supported by the Literature? North American Spine Society. October, 2004; Chicago, Illinois.
- 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.
- 176. Guyer RD: Lumbar Disc Replacement. Emerging Technologies in Spinal Care Fifth Annual Herman Lohman Memorial Symposium. November, 2004; Livingston, New Jersey.
- 177. McAfee PC, Cunningham BW, Blumenthal SL, Guyer RD, Regan JJ: A Prospective Randomized FDA Study of the Charité Disc Replacement. February, 2005; Washington, D.C.
- 178. Guyer RD: Review of Lumbar Arthroplasty. North American Spine Society Spring Break. April, 2005; Bal Harbour, Florida.
- 179. Guyer RD: Total Posterior Element Replacement. North American Spine Society Spring Break. April, 2005; Bal Harbour, Florida.
- 180. 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. Spinal Arthroplasty Society. May, 2005; New York, New York.
- 181. Regan JJ, McAfee PC, Guyer RD, Blumenthal SL, Geisler FH, Garcia R Jr., Maxwell JH: Evaluation of the Learning Curve Associated with Artificial Disc Replacement: Analysis from the Prospective, Randomized, Multicenter FDA IDE Study. Spinal Arthroplasty Society. May, 2005; New York, New York.
- 182. Elders GJ, Blumenthal SL, Guyer RD, Hochschuler SH, Rashbaum RF, Sachs BL, Zigler JE, Ohnmeiss DD: Effect of Facet Joint Arthrosis on Outcome after Artificial Disc Replacement. Spinal Arthroplasty Society. May, 2005; New York, New York.
- 183. Guyer RD, Tromanhauser S, Toselli R: An Economic Analysis of Lumbar Total Disc Replacement vs. Fusion. Spinal Arthroplasty Society. May, 2005; New York, New York.
- 184. 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 <sup>™</sup> Artificial Disc. International Society for the Study of the Lumbar Spine. May, 2005; New York, New York.
- 185. Guyer R, Sohn J, Blumenthal S, Hochschuler S, Ohnmeiss D: Range of Motion Analysis of the Lumbar Spine after Total Disc Replacement: A Prospective Two-Year Follow-Up Study. International Society for the Study of the Lumbar Spine. May, 2005; New York, New York.
- 186. Whitaker C, Hochschuler S, Ohnmeiss D, Zigler J, Guyer R, Sachs B, Blumenthal S, Rashbaum R: Return to work following total disc replacement vs. fusion: A prospective, randomized, comparison study. International Society for the Study of the Lumbar Spine. May, 2005; New York, New York.

- 187. Guyer RD: Live Surgery: Total Artificial Disc Prosthesis Lumbar (broadcast from Switzerland). Live Instructional Non-Fusion Spine Course. May, 2005; New York, New York.
- 188. Guyer RD, Stoll J: Debate: Artificial Lumbar Disc vs. Traditional Fusion. Emerging Technologies in Spine Surgery. June, 2005; Las Vegas, Nevada.
- 189. Guyer RD: Charité. Innovative Techniques in Spine Surgery. July, 2005; Los Cabos, Mexico.
- 190. Regan JJ, McAfee PC, Guyer RD, Blumenthal SL, Geisler FH, Garcia R Jr., Maxwell JH: Evaluation of the Learning Curve Associated with Artificial Disc Replacement: Analysis from the Prospective, Randomized, Multicenter FDA IDE Study. International Meeting on Advanced Spine Techniques (IMAST). July, 2005; Banff, Alberta, Canada.
- 191. McAfee, PC, Geisler FH, Saidy S, Regan JJ, Guyer RD, Blumenthal SL, Fedder I, Tortolani J, Cunningham B: Revisability of the CHARITÉ Artificial Disc Replacement Analysis of 347 Patients Enrolled in the US IDE Study of the CHARITÉ Artificial Disc. International Meeting on Advanced Spine Techniques (IMAST). July, 2005; Banff, Alberta, Canada.
- 192. Holt RT, Majd ME, Isaza JE, Blumenthal SL, McAfee PC, Guyer RD, Hochschuler SH: Complications of Lumbar Artificial Disc Replacement vs. Fusion: Results from the Randomized, Multicenter FDA IDE Study of the CHARITÉ Artificial Disc. International Meeting on Advanced Spine Techniques (IMAST). July, 2005; Banff, Alberta, Canada.
- 193. Guyer RD, Tromanhauser SG, Regan JJ, Tosell R: An Economic Analysis of Lumbar Total Disc Replacement vs. Fusion. International Meeting on Advanced Spine Techniques (IMAST). July, 2005; Banff, Alberta, Canada.
- 194. Guyer RD, Blumenthal SL, Hochschuler SH, McAfee PC, Regan JJ, Ohnmeiss DD: Prospective randomized comparison of total disc replacement to fusion a 24 month followup FDA regulated study. World Spine. August, 2005; Brazil.
- 195. Holt RT, SL Blumenthal, PC McAfee, ME Majd, RD Guyer, JE Isaza, SH Hochschuler, FH Geisler, R Garcia Jr., JJ Regan, DD Ohnmeiss: Complications and Clinical Outcome of Lumbar Artificial Disc Replacement vs. Fusion: Results from the Randomized, Multicenter FDA IDE Study of the CHARITÉ Artificial Disc. EuroSpine. September, 2005; Barcelona, Spain.
- 196. Blumenthal SL, McAfee PC, Guyer RD, Hochschuler SH, Garcia R Jr., Regan JJ, Ohnmeiss DD: Prospective Randomized Comparison of Total Disc Replacement to Fusion A 24-month Follow-Up FDA Regulated Study Combined with 720. EuroSpine. September, 2005; Barcelona, Spain.
- 197. Guyer RD: Clinical Issues with the Charité. Emerging Technology meeting. September, 2005; Washington, D.C.
- 198. McAfee P, Geisler F, Regan J, Blumenthal SL, Guyer R, Fedder I, Tortolani J, Cunningham B, Saiedy S: Revisability of the Charité Artificial Disc Replacement: Analysis of 347 Patients Enrolled in the US IDE Study of the Charité Artificial Disc. North America Spine Society. Sept-Oct, 2005; Philadelphia, Pennsylvania.

- 199. Holt RT, 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. North America Spine Society. Sept-Oct, 2005; Philadelphia, Pennsylvania.
- 200. Guyer R, Tromanhauser S, Toselli R: An Economic Analysis of Lumbar Total Disc Replacement vs. Fusion. North America Spine Society. Sept-Oct, 2005; Philadelphia, Pennsylvania.
- 201. Guyer RD: Flexible Posterior Rods (Symposium on Emerging Technology). North American Spine Society; Sept-Oct, 2005; Philadelphia, Pennsylvania.
- 202. Geisler FH, Holt RT, Majd ME, Isaza J, Blumenthal SL, McAfee PC, Guyer RD, Hochschuler SH, Garcia R, Regan JJ: Complications of Lumbar Artificial Disc Replacement versus Fusion: Results from the Randomized, Multicenter Food and Drug Administration Investigational Device Exemption Study of the CHARITÉ Artificial Disc. Congress of Neurological Surgeons. October, 2005; Boston, Massachusetts.
- 203. Geisler FH, McAfee PC, Saiedy S, Moore S, Blumenthal SL, Guyer RD, Regan JJ: The Revisability of the CHARITÉ´ Artificial Disc: Analysis of 688 Consecutive Patients from a Prospective, Randomized, Multicenter IDE Trial. Congress of Neurological Surgeons. October, 2005; Boston, Massachusetts.
- 204. Guyer RD: The TOPS System. Non Fusion Technologies in Spinal Surgery. November, 2005; Brussels, Belgium.
- 205. Guyer RD: Charité. Non Fusion Technologies in Spinal Surgery. November, 2005; Brussels, Belgium.
- 206. Guyer RD: Teeth Anchoring. 3<sup>rd</sup> Trans Atlantic Spine Congress "Innovations in Spine Surgery". November, 2005; Dallas, Texas/Zurich, Switzerland.
- 207. Guyer RD: Update on Charité. 3<sup>rd</sup> Trans Atlantic Spine Congress "Innovations in Spine Surgery". November, 2005; Dallas, Texas/Zurich, Switzerland.
- 208. Guyer RD: 5-year Follow-up of Patients Enrolled in the Charité Artificial Disc IDE Study. Spine Arthroplasty Summit. February, 2006; Salt Lake City, Utah.
- 209. Guyer RD: An Economic Analysis of Lumbar Arthroplasty vs. Fusion. Spine Arthroplasty Summit. February, 2006; Salt Lake City, Utah.
- 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.
- 213. Guyer RD: Testing of Arthroplasty Devices: Clinical Outcomes. North American Spine Society Spring Break. March, 2006; San Diego, California.
- 214. Guyer RD: Spinal Stenosis: Surgical Decompression. North American Spine Society Spring Break. March, 2006; San Diego, California.

- 215. Guyer RD: Since FDA Approval Lumbar Disc Arthroplasty has been Extremely Successful for the Following Reasons. . . (Debate Session). Federation of Spine Associations. March, 2006; Chicago, Illinois.
- 216. Geisler F, Blumenthal S, Guyer R, McAfee P, Regan J: Alternative Statistical Testing Demonstrates Superiority of Lumbar Arthroplasty Clinical Outcomes at 2 Years vs. Fusion for the Treatment of One-Level Lumbar Degenerative Disc Disease at L4-5 or L5-S1. Spine Arthroplasty Society. May, 2006; Montreal, Canada.
- 217. Siddiqui S, Guyer R, Zigler J, Ohnmeiss D, Blumenthal S, Sachs B, Hochschuler S: Factors Related to the 20 Best and 20 Worst 24-months Outcomes of Total Disc Replacement in Prospective FDA-regulated Trials. Spine Arthroplasty Society. May, 2006; Montreal, Canada.
- 218. Guyer RD: Indications and Results of the S.B. Charité Arthroplasty Device Advanced Lumbar Spine Surgery: Minimally Invasive Surgery and Motion Preservation: A Hands-On Course. June, 2006; Memphis, Tennessee.
- 219. Lhamby J, Guyer R, Zigler J, Blumenthal S, Sachs B, Hochschuler S, Rashbaum R, Ohnmeiss D: Patients Undergoing Total Disc Replacement with Spinal Fusion at Different Lumbar Levels. International Society for the Study of the Lumbar Spine. Bergen, Norway; June, 2006.
- 220. McAfee, P, Geisler F, Saiedy S, Moore S, Regan J, Guyer R, Blumenthal S, Fedder I, Tortolani J, Cunningham B: Revisability of the Charité Artificial Disc Replacement Analysis of 688 Patients Enrolled in the US IDE Study of the Charité Artificial Disc. International Society for the Study of the Lumbar Spine. Bergen, Norway; June, 2006.
- 221. Guyer RD: Is Motion Preservation the way to go? (Debate: Pro) International Society for the Study of the Lumbar Spine. Bergen, Norway; June, 2006.
- 222. Guyer RD: Charité. Innovative Techniques in Spine Surgery. June, 2006; Los Cabos, Mexico.
- 223. Guyer RD: Indications and Results of the S.B. Charité Arthroplasty Device Advanced Lumbar Spine Surgery: Minimally Invasive Surgery and Motion Preservation: A Hands-On Course. June, 2006; Memphis, Tennessee.
- 224. Lhamby J, Guyer R, Zigler J, Blumenthal S, Sachs B, Hochschuler S, Rashbaum R, Ohnmeiss D: Patients Undergoing Total Disc Replacement with Spinal Fusion at Different Lumbar Levels. Spine Across the Sea. July, 2006; Maui, Hawaii.
- 225. Siddiqui S, Guyer R, Zigler J, Ohnmeiss D, Blumenthal S, Sachs B, Hochschuler S: Factors Related to the 20 Best and 20 Worst 24-months Outcomes of Total Disc Replacement in Prospective FDA-regulated Trials. Spine Across the Sea. July, 2006; Maui, Hawaii.
- 226. Guyer RD, Blumenthal SL, Geisler FH, McAfee PC, Regan JJ: The First Year Following FDA Approval of the CHARITÉ Artificial Disc: "Real World" Adverse Events Outside an IDE Study Environment. Spine Across the Sea. July, 2006; Maui, Hawaii.

- 227. Siddiqui S, Hochschuler SH, Guyer RD, Zigler JE, Ohnmeiss DD, Blumenthal SL, Sachs BL, Rashbaum RF, Craig L: Factors Related to the 20 Best and 20 Worst 24-month Outcomes of Total Disc Replacement in Prospective FDA-regulated Trials. International Meeting on Advanced Spine Techniques (IMAST). July, 2006; Athens, Greece.
- 228. Blumenthal SL, Banco RJ, Bitan FD, Cappuccino A, Geisler FH, Guyer RD, Hochschuler SH, Holt RT, Jenis LG, Majd ME, McAfee PC, Mullin BB, Regan JJ, Stadlan NY, Tromanhauser SG, Wong DC: Lumbar Arthroplasty vs. Anterior Interbody Fusion at One-Level: Clinical Results at 5-Year Follow-up from the IDE Study of the CHARITÉ Artificial Disc. International Meeting on Advanced Spine Techniques (IMAST). July, 2006; Athens, Greece.
- 229. Blumenthal SL, Guyer RD, Geisler FH, McAfee PC, Regan JJ: The First Year Following FDA Approval of the CHARITÉ Artificial Disc: "Real World" Adverse Events Outside an IDE Study Environment. International Meeting on Advanced Spine Techniques (IMAST). July, 2006; Athens, Greece.
- 230. McAfee PC, Geisler FH, Saiedy S, Regan JJ, Guyer RD, Hochschuler SH, Cunningham BW: Revisions of Artificial Disc Replacement Analysis of 688 Patients Enrolled in a US IDE Prospective Randomized Trial. International Meeting on Advanced Spine Techniques (IMAST). July, 2006; Athens, Greece.
- 231. Geisler FH, Hochschuler SH, Guyer RD, McAfee PC, Regan JJ: Alternative Statistical Testing Demonstrates Superiority of Lumbar Arthroplasty Clinical Outcomes at 2 years vs. Fusion for the Treatment of One-Level Lumbar Degenerative Disc Disease at L4-5 or L5-S1. International Meeting on Advanced Spine Techniques (IMAST). July, 2006; Athens, Greece.
- 232. Guyer RD: Anterior Cervical Fusion. Simpósio Internacional de Coluna (SINCOL). August, 2006; Rio de Janeiro, Brazil.
- 233. Guyer RD: Dynamic Screw Fixation non-constrictive (Dynesys). Simpósio Internacional de Coluna (SINCOL). August, 2006; Rio de Janeiro, Brazil.
- 234. Guyer RD: Pseudoarthrosis (or Failed Back?) Diagnostic and Treatment. Simpósio Internacional de Coluna (SINCOL). August, 2006; Rio de Janeiro, Brazil.
- 235. Guyer RD: News Perspectives on the treatment of Degenerative Disc Disease. Simpósio Internacional de Coluna (SINCOL). August, 2006; Rio de Janeiro, Brazil.
- 236. Guyer RD: Spine Arthroplasty Economic Impact. Simpósio Internacional de Coluna (SINCOL). August, 2006; Rio de Janeiro, Brazil.
- 237. Guyer, RD, How to Capitalize on Idea Development from the Front Lines: Or from Napkin Drawings to Real World Agreements. Precourse: Your Innovative Idea: Technology Development Options. North American Spine Society. September, 2006; Seattle, Washington.
- 238. Siddiqui S, Guyer RD, Zigler JE, Ohnmeiss DD, Craig L, Blumenthal SL, Sachs BL, Hochschuler SH, Rashbaum RF. Factors Related to the 20 Best and 20 Worst 24 Month Outcomes of Total Disc Replacement in Prospective FDA-Regulated Trials. North American Spine Society. September, 2006; Seattle, Washington.

- 239. Guyer RD, Blumenthal SL, Geisler FH, McAfee PC. One-Level Lumbar Arthroplasty in Patients 18-45 Years of Age vs. Patients 46-60 Years of Age: Is There a Difference in Clinical Outcome? North American Spine Society. September, 2006; Seattle, Washington.
- 240. Blumenthal SL, Guyer RD, Geisler FH, McAfee PC, Regan JJ: The First Year Following FDA Approval of the CHARITÉ Artificial Disc: Real World Adverse Events Outside an IDE Study Environment. Spine Society of Europe (EuroSpine). October, 2006; Istanbul, Turkey.
- 241. Guyer RD: Defining Patient Selection: The Art of Avoiding Complications. Federation or Spine Associations. February, 2007; San Diego, California.
- 242. Guyer RD: Motion Preservation Technologies and Their Outcome (Instructional Course Lecture). American Academy of Orthopaedic Surgeons. February, 2007; San Diego, California.
- 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.
- 245. Guyer RD: How Disc Replacement Fits in the Treatment Algorithm for Degenerative Disc Disease: Refining Indications for Disc Replacement. Stryker Spine International Symposium. April, 2007; Lisbon, Portugal.
- 246. Guyer RD, McAfee PC, Banco RJ, Bitan FD, Cappuccino A, Geisler FH, Hochschuler SH, Holt RT, Jenis LG, Majd ME, Mullin BB, Regan JJ, Stadian NY, Tromanhauser SG, Wong DC, Blumenthal SL: Lumbar arthroplasty vs. anterior interbody fusion at one-level clinical results at 5-year follow-up from the IDE study of Charité Artificial Disc. Spine Arthroplasty Society. May, 2007; Berlin, Germany.
- 247. Blumenthal SL, Geisler F, Zigler JE, Guyer RD, Ohnmeiss DD: Similarities and Differences in Clinical and Radiographic Outcomes of Two US IDE Trials for Lumbar Disc Replacement. Spine Arthroplasty Society. May, 2007; Berlin, Germany.
- 248. Cunningham BW, DeMuth G, McAfee PC, Scott-Young M, Yoon K, Blumenthal S, Guyer R, Geisler F, Regan J, Conix JB, Hess R, Pimenta L, Diaz R, Fedder I, Tortolani PJ: Survivor analysis of the Charité artificial disc: Review of 1,938 patients from eight leading international spine centers. Spine Arthroplasty Society. May, 2007; Berlin, Germany.
- 249. Geisler FH, Guyer RD, Blumenthal SL, McAfee PC, Cappuccino A, Bitan F, Regan JJ: The effect of previous surgery on clinical outcome following one-level lumbar arthroplasty. Spine Arthroplasty Society. May, 2007; Berlin, Germany.
- 250. Geisler FH, Guyer RD, Blumenthal SL, McAfee PC, Cappuccino A, Bitan F, Regan JJ: Evidence for One-Level Lumbar Arthroplasty or Arthrodesis for Degenerative Disc Disease: A Comparison of Two Lumbar Arthroplasty IDE Studies with 2-year Follow-Up. Spine Arthroplasty Society. May, 2007; Berlin, Germany.

- 251. Blumenthal SB, Zigler JE, Guyer RD, Ohnmeiss DD: Comparison of Charité vs. ProDisc for the Treatment of Single-level Symptomatic Disc Degeneration: Prospective Data from One Center. International Society for the Study of the Lumbar Spine. June, 2007; Hong Kong, China.
- 252. Guyer RD, Blumenthal SL, Hochschuler SH, Ohnmeiss DD: A Prospective Randomized Study Comparing Two Lumbar Total Disc Replacement Devices. International Meeting on Advanced Spinal Techniques (IMAST). July, 2007; Paradise, Bahamas.
- 253. Cunningham BW, Demuth G, McAfee PC, Scott-Young M, Yoon, KJ, Blumenthal SL, Guyer RD, MD, Geisler F, Regan JJ, Conix B, Hes R, Pimenta L, Diaz R, Fedder RL, Tortolani J. Survivorship Analysis of the CHARITÉ Artificial Disc: Review of 1,938 Patients from Eight Leading International Spine Centers. International Meeting on Advanced Spinal Techniques (IMAST). July, 2007; Paradise, Bahamas.
- 254. McAfee PC, Cunningham BW, Geisler F, Guyer RD, Blumenthal SL, MD, Cappuccino A, Regan JJ: A Comparison of In Vivo and In Vitro Range of Motion Distribution Following One-Level Lumbar Arthroplasty —2 to 5 year Radiographic Follow up of 375 Consecutive Patients Enrolled in the CHARITÉ Artificial Disc FDA Level I Pivotal Trial. International Meeting on Advanced Spinal Techniques (IMAST). July, 2007; Paradise, Bahamas.
- 255. Guyer RD, Lhamby J, Ohnmeiss DD, Zigler J, Blumenthal S: Total Disc Replacement and Fusion at Different Lumbar Levels in The Same Patient. World Spine. July, 2007; Istanbul, Turkey.
- 256. Guyer RD: Myths of Spine Surgery. Neuroscience Lecture Series. August, 2007; Plano, Texas.
- 257. Blumenthal SL, Guyer RD, Ohnmeiss DD, Sachs BL, Hochschuler SH, Rashbaum RF: Comparison of Charité vs. ProDisc for the Treatment of Single-level Symptomatic Disc Degeneration: Prospective Data from One Center. Spine Society of Europe. October, 2007; Brussels, Belgium.
- 258. Guyer RD, McAfee PC, Banco RJ, Bitan FD, Cappuccino A, Geisler FH, Hochschuler SH, Holt RT, Jenis LG, Majd ME, Mullin BB, Regan JJ, Stadian NY, Tromanhauser SG, Wong DC, Blumenthal SL: Lumbar arthroplasty vs. anterior interbody fusion at one-level clinical results at 5-year follow-up from the IDE study of Charité artificial disc. North American Spine Society. October, 2007; Austin, Texas.
- 259. Cunningham BW, Demuth G, McAfee PC, Scott-Young M, Yoon, KJ, Blumenthal SL, Guyer RD, MD, Geisler F, Regan JJ, Conix B, Hes R, Pimenta L, Diaz R, Fedder RL, Tortolani J. Survivorship Analysis of the CHARITÉ Artificial Disc: Review of 1,938 Patients from Eight Leading International Spine Centers. North American Spine Society. October, 2007; Austin, Texas.
- 260. Guyer RD: The Paradox in Medicine Today -Exciting Technology and Economic Challenges. (Presidential Address) North American Spine Society. October, 2007; Austin, Texas.

- 261. Blumenthal S, Roush T, Guyer R, Ohnmeiss D: Analysis of Hybrid (Total Disc Replacement / Fusion Constructs) in the Lumbar Spine: A Comparison with Two-Level Total Disc Replacement. Asian Pacific Spine Arthroplasty Society. January, 2008; Seoul, South Korea.
- 262. Guyer R, Cappuccino A, Blumenthal S: A Prospective Randomized Comparison of Two Lumbar Total Disc Replacements. Asian Pacific Spine Arthroplasty Society. January, 2008; Seoul, South Korea.
- 263. McAfee PC, Blumenthal SL, Guyer RD, Holt RT, Majd ME, Geisler FH, Banco RJ: Prospective, Randomized, Multicenter FDA IDE Study of Charité™ Artificial Disc vs. Lumbar Fusion: Effect at 5-Year Follow-up of Prior Surgery on Clinical Outcomes following Lumbar Arthroplasty. Congress of Neurological Surgeons/American Association of Neurological Surgeons. February, 2008; Orlando, Florida.
- 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<sup>TM</sup> Artificial Disc Versus Lumbar Fusion 5-Year Follow-up. Congress of Neurological Surgeons/American Association of Neurological Surgeons. February, 2008; Orlando, Florida.
- 270. Banco RJ, Geisler FH, Guyer RD, Hetzell B, Holt RT, Majd ME: Prospective, Randomized, Multicenter FDA IDE Study of CHARITÉ Artificial Disc vs. Lumbar fusion: Effect at 5-year follow-up of Age on Clinical outcomes following lumbar arthroplasty. Congress of Neurological Surgeons / American Association of Neurological Surgeons. February, 2008; Orlando, Florida.
- 271. 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 on Clinical outcomes following lumbar arthroplasty. Congress of Neurological Surgeons / American Association of Neurological Surgeons. February, 2008; Orlando, Florida.

- 272. Guyer RD: The Appropriate Process of Developing New Technology. (Symposium: Novel Technology for the Treatment of Spinal Disorders and the Effect on Orthopaedic Surgeons). American Academy of Orthopaedic Surgeons. March, 2008; San Francisco, California.
- 273. Guyer RD: Off-label Use of Innovative Medical Technology. Lumbar Spine Research Society. April, 2008; Chicago, Illinois.
- 274. Guyer, RD, Cappuccino A, Blumenthal SL: A Prospective Randomized Comparison of Two Lumbar Total Disc Replacements. Spine Arthroplasty Society. May, 2008; Miami, Florida.
- 275. Banco RJ, Geisler FH, Guyer RD, Hetzell B, Holt RT, Majd ME: Prospective, Randomized, Multicenter FDA IDE Study of CHARITÉ Artificial Disc vs. Lumbar fusion: Effect at 5-year follow-up of Age on Clinical outcomes following lumbar arthroplasty. Spine Arthroplasty Society. May, 2008; Miami, Florida.
- 276. Geisler FH, Banco R, Blumenthal SL, Guyer RD, McAfee PC, Holt RT, Majd ME, Regan JJ: Prospective, Randomized, Multicenter FDA IDE Study of CHARITÉ Artificial Disc vs. Lumbar Fusion: Effect at 5-year Follow-up of Prior Discectomy on Clinical Outcomes Following Lumbar Arthroplasty. Spine Arthroplasty Society. May, 2008; Miami, Florida.
- 277. McAfee PC, Banco RJ, Blumenthal SL, Geisler FH, 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 on Clinical Outcomes Following Lumbar Arthroplasty. Eurospine. May, 2008; Geneva, Switzerland.
- 278. Guyer RD, Lauryssen C, Blumenthal SL: A Prospective Randomized Comparison of Cervical Total Disc Replacement to Anterior Cervical Fusion. North American Spine Society SpineWeek. May, 2008; Geneva, Switzerland.
- 279. Guyer RD, Cappuccino A, Blumenthal SL: A Prospective Randomized Comparison of Two Lumbar Total Disc Replacements. North American Spine Society SpineWeek. May, 2008; Geneva, Switzerland.
- 280. Guyer RD: Kineflex. Innovative Techniques in Spine Surgery. June, 2008; Los Cabos, Mexico.
- 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.
- 285. Guyer RD: Fusion versus Hybrid Total Disc Replacement for Degenerative Disc Disease. Simposio Internacional de Coluna. July, 2008; Rio de Janeiro, Brazil.

- 286. Li B, Guyer RD, Blumenthal SL, Zigler JE, Ohnmeiss DD: Does Pre-Operative Disc Height Affect Outcome of Lumbar Total Disc Replacement? International Meeting on Advanced Spinal Techniques (IMAST). July, 2008; Hong Kong, China.
- 287. Guyer RD, Geisler FH, Holt RT, Majd ME, Regan JJ, Wong DC, Jenis LG, Banco RJ, Blumenthal SL, DeMuth GE, Hetzell BC: The Impact of Postoperative Disc Height following Arthroplasty on Long-term Clinical and Radiographic Outcomes a 5-Year Follow-up Study. International Meeting on Advanced Spinal Techniques (IMAST). July, 2008; Hong Kong, China.
- 288. Guyer RD, McAfee PC, Banco RJ, Bitan FD, Cappuccino A, Geisler FH, Hochschuler SH, Holt RT, Jenis LG, Majd ME, Regan JJ, Stadlan NY, 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 5 Year Follow-up. International Meeting on Advanced Spinal Techniques (IMAST). July, 2008; Hong Kong, China.
- 289. Banco RJ, Geisler FH, Guyer RD, Hetzell B, Holt RT, Majd, ME: Prospective, Randomized, Multicenter FDA IDE Study of CHARITÉ Artificial Disc vs. Lumbar fusion: Effect at 5-year follow-up of Age on Clinical outcomes following lumbar arthroplasty. International Meeting on Advanced Spinal Techniques (IMAST). July, 2008; Hong Kong, China.
- 290. McAfee PC, Banco RJ, Blumenthal SL, Geisler FH, 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 on Clinical outcomes following lumbar arthroplasty. International Meeting on Advanced Spinal Techniques (IMAST). July, 2008; Hong Kong, China.
- 291. Geisler FH, Banco RJ, Blumenthal SL, Guyer RD, McAfee PC, Holt RT, Majd ME, Regan JJ: Prospective, Randomized, Multicenter FDA IDE Study of CHARITÉ Artificial Disc vs. Lumbar fusion: Effect at 5-year follow-up of Prior Discectomy on Clinical outcomes following lumbar arthroplasty. International Meeting on Advanced Spinal Techniques (IMAST). July, 2008; Hong Kong, China.
- 292. Blumenthal SL, Ohnmeiss DD, Guyer RD, Hochschuler SH: Analysis of Total Disc Replacement Outcomes When Applying MCID (Minimal Clinically Important Difference) Criteria. International Meeting on Advanced Spinal Techniques (IMAST). July, 2008; Hong Kong, China.
- 293. 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. International Meeting on Advanced Spinal Techniques (IMAST). July, 2008; Hong Kong, China.
- 294. 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.
- 295. Guyer RD: Surgical Options for the Degenerative Cascade. Simposio Internacional de Coluna. July, 2008; Rio de Janeiro, Brazil.

- 296. Guyer RD: New Surgical Options for Spinal Stenosis. Simposio Internacional de Coluna. July, 2008; Rio de Janeiro, Brazil.
- 297. 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.
- 298. Guyer RD: Fusion versus Hybrid Total Disc Replacement for Degenerative Disc Disease. Simposio Internacional de Coluna. July, 2008; Rio de Janeiro, Brazil.
- 299. Guyer RD: Myths of Spine Surgery. Neuroscience Lecture Series. August, 2008; Plano, Texas.
- 300. Guyer RD: Lumbar ADR: State of the Art. (Pre-course). North American Spine Society. October, 2008; Toronto, Canada.
- 301. Guyer RD, Cappucino A, Blumenthal S: A Prospective Randomized Comparison of Two Lumbar Total Disc Replacements. North American Spine Society. October, 2008; Toronto, Canada.
- 302. Guyer RD, Geisler F, Majd M, Holt RT, Regan J, Blumenthal S, Wong D, Jenis L, Banco R: The Impact of Preoperative DEXA Scores Following Arthroplasty on Long-term Clinical and Radiographic Outcomes a 5-Year Follow-up Study. North American Spine Society. October, 2008; Toronto, Canada.
- 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.
- 316. 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. Spine Arthroplasty Society. April-May, 2009; London, England.
- 317. Ohnmeiss DD, Guyer RD, Blumenthal SL, Zigler JE: Impact of Adverse Events on Outcome in Cervical Total Disc Replacement Trials. Spine Arthroplasty Society. April-May, 2009; London, England.
- 318. Guyer RD, Cappuccino A, Blumenthal SL: 24-month Follow-up of a Prospective Randomized Comparison of Two Lumbar Total Disc Replacements. Spine Arthroplasty Society. April-May, 2009; London, England.
- 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.
- 321. Zigler JE, Parkinson A, Guyer RD, Blumenthal SL, Ohnmeiss DD: Re-operations in Lumbar Total Disc Replacement: Experience with Our First Consecutive 800 Cases. International Society for the Study of the Lumbar Spine. May, 2009; Miami, Florida.
- 322. 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 Four Collected Cases. Spine Across the Sea. July, 2009; Maui, Hawaii.
- 323. Guyer RD, Auer PB, Zigler JE, Blumenthal SL, Ohnmeiss DD: Relationship between Endplate Morphology and Clinical Outcome of Single-Level Lumbar Disc Arthroplasty. Spine Across the Sea. July, 2009; Maui, Hawaii.

- 324. 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 Across the Sea. July, 2009; Maui, Hawaii.
- 325. Zigler JE, Guyer RD, Ohnmeiss DD, Blumenthal SL: Anterior Re-operation at the Same Level Following Lumbar Total Disc Replacement. Spine Across the Sea. July, 2009; Maui, Hawaii.
- 326. Blumenthal S, Zigler J, Rodriguez M, Guyer RD, Ohnmeiss DD, Atanasov A: Cervical Disc Replacement vs. Anterior Cervical Fusion: Combined Results from Multiple Prospective, Randomized Studies at a Single Site. Spine Across the Sea. July, 2009; Maui, Hawaii.
- 327. Guyer RD, Pettine K, Blumenthal S, Duffy M: 24-month Follow-up of a Prospective, Randomized Study Comparing Two Lumbar Total Disc Replacements. Spine Across the Sea. July, 2009; Maui, Hawaii.
- 328. Guyer RD, Shellock J, MacLennan B, Hanscom D, Urban R, 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. International Meeting on Advanced Spine Techniques (IMAST). July, 2009; Vienna; Austria.
- 329. Zigler JE, Parkinson A, Guyer RD, Blumenthal SL, Ohnmeiss DD: Re-operations in Lumbar Total Disc Replacement: Experience with Our First Consecutive 800 Cases. International Meeting on Advanced Spine Techniques (IMAST). July, 2009; Vienna; Austria.
- 330. Saidy S, McAfee PC, Geisler FH, Moore S, Regan J, Guyer RD, Blumenthal S, Fedder IL, Tortolani JP, Cunningham BW: Revision Following Lumbar Total Disc Replacement: Analysis of Reoperations in the U.S. IDE Study of Lumbar Arthroplasty. International Meeting on Advanced Spine Techniques (IMAST). July, 2009; Vienna; Austria.
- 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, Lauryssen 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.

- 349. Guyer RD, Blumenthal SL, Bailey A, Amundson G, Chedid M, Gerdes JS, Messer J, Griffith S: Preliminary Observations from a Prospective, Multi-Center, Randomized, Controlled Clinical Trial Evaluating Anular Repair after Lumbar Discectomy. Spine Arthroplasty Society. April, 2010; New Orleans, Louisiana.
- 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.
- 353. Musante DB, Guyer RD, Coric D, Gordon C, Nunley P, Carmody C: Comparison of Radiographic Findings of Total Disc Replacement vs. Anterior Cervical Fusion: 24-Month Follow-Up from a Prospective, Randomized, Controlled, Multicenter Trial with 269 Patients. International Meeting on Advanced Spine Techniques. July, 2010; Toronto, Canada.
- 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.
- 355. Ohnmeiss DD, Hume CS, Blumenthal SL, Guyer RD, Zigler JE: Cost Comparison of Total Disc Replacement versus Fusion in Patients with Insurance Denial for Disc Replacement. International Meeting on Advanced Spine Techniques. July, 2010; Toronto, Canada.
- 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.
- 364. Ohnmeiss DD, Hume CS, Blumenthal SL, Guyer RD, Zigler JE: Cost Comparison of Total Disc Replacement vs. Fusion in Patients with Insurance Denial for Disc Replacement. North American Spine Society. October, 2010; Orlando, Florida.
- 365. Guyer RD, Pettine KA, Knight RQ, Dimmig TA, Coric D, McAfee PC, Gordon C, Cappuccino A, Buckley R, Nunley P, Geisler F, Peppers TA, Rappaport J, Lauryssen C, Dix G, Cheng WK, Hu Serena, Lee YP, Bitan FD, Bains R: Direct Comparison of Two Lumbar Total Disc Replacement Devices: Results from a Prospective, Randomized, Multicenter FDA-Regulated Trial. North American Spine Society. October, 2010; Orlando, Florida.
- 366. Guyer RD, Pettine KA, Knight RQ, Dimmig TA, Coric D, McAfee PC, Gordon C, Cappuccino A, Buckley R, Nunley P, Geisler F, Peppers TA, Rappaport J, Lauryssen C, Dix G, Cheng W, Hu S, Lee YP, Bitan FD, Bains R: Radiographic Comparison of Two Lumbar Total Disc Replacement Devices: Results from a Prospective, Randomized, Controlled Multicenter FDA-Regulated Trial. North American Spine Society. October, 2010; Orlando, Florida.
- 367. Guyer RD, Coric D, Gordon C, Nunley PD, Carmody C, Dimmig TA, Taylor W, Buckley R, Donner J, Lauryssen C, Rhee J, Gerszten PC, Tortolani PJ, Rappaport J, Knight RQ, Dix G, Foley KT, Bitan FD, Bains R, Herkowitz HN: Prospective, Randomized, Multicenter Trial Comparing Cervical Total Disc Replacement to Anterior Cervical Fusion in 269 Patients: 24-Month Follow-Up. North American Spine Society. October, 2010; Orlando, Florida.
- 368. Musante DB, Coric D, Guyer RD, Gordon C, Nunley P, Carmody C, Dimmig TA, Taylor W, Buckley R, Donner J, Lauryssen C, Rhee J, Gerszten PC, Tortolani PJ, Rappaport J, Knight RQ, Dix G, Foley KT, Bitan FD, Bains R, Herkowitz HN: Comparison of Radiographic Findings of Total Disc Replacement vs. Anterior Cervical Fusion: 24-Month Follow-Up from a Prospective, Randomized, Controlled, Multicenter Trial with 269 Patients. North American Spine Society. October, 2010; Orlando, Florida.
- 369. Blumenthal SL, Zigler JE, Guyer RD, Ohnmeiss DD: Anterior Re-Operations at the Same Level Following Lumbar Total Disc Replacement. North American Spine Society. October, 2010; Orlando, Florida.
- 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.
- 371. 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. North American Spine Society. October, 2010; Orlando, Florida.

- 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. (Precourse: 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.
- 384. Zigler JE, Blumenthal SL, Guyer RD, Hisey MS, Atanasov A, 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. AO Spine Global Spine Congress. March, 2011; Barcelona, Spain.
- 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, Lauryssen 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, AtanasovA, 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 Reoperation 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 Preoperative 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 Reoperation 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 Reoperation 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 o tIncrease 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 Exhibiters 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 Spondy 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 Prothesis: 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 Superion. 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, 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. 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 Paraspinous 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 3<sup>rd</sup> best abstract) Cervical Spine Research Society. December, 2021; Atlanta, Georgia.
- 652. Lavelle W, Sasso R, Bae H, Yoon S, Bains R, Kuo C, Stauff M, Sandhu H, Perez-Cruet M, Berven S, Fischgrund J, Merman MJ, Deutsch H, Hassanzadeh H, Yu E, Metkar U, Guyer R, Gum J, Alamin T, Fielding L: Return to Work, Activities of Daily Living and Disability

- Improvement: 12-month Outcomes of an FDA IDE Trial of Decompression and Tension Band Stabilization for Degenerative. Spondylolisthesis. Lumbar Spine Research Society. April, 2022; Chicago, Illinois.
- 653. Shahzad H, Bhatti B, Fielding L, Sasso R, Bae H, Yoon S, Lavelle W, Bains R, Kuo C, Sandhu H, Stauff M, Perez-Cruet M, Berven S, Fischgrund J, Deutsch H, Hassanzadeh H, Guyer R, Gum J, Alamin T, Yu E: Comparing Health-related quality of life (QoL) between Decompression and Paraspinous Tension Band Stabilization (D+PTB) and Transforaminal lumbar interbody fusion (TLIF) for Lumbar Degenerative Spondylolisthesis (DS). Lumbar Spine Research Society. April, 2022; Chicago, Illinois.
- 654. Lavelle WF, Sasso RC, Yoon ST, Villavicencio A, Bains RS, Kim KD, Kuo CC, Stauff MP, Sandhu HS, Perez-Cruet M, Fischgrund J, Mermer MJ, Deutsch H, Sethi K, Hassanzadeh H, Yu E, Metkar US, Guyer RD, Crandall DG, Gum JL, Wang MY, Fielding LC: Return to Work, Activities of Daily Living and Disability Improvement: 12-month Outcomes of an FDA IDE Trial of Decompression and Tension Band Stabilization for Degenerative Spondylolisthesis. International Meeting on Advanced Spine Technologies. April, 2022; Miami, Florida.
- 655. Guyer RD, Blumenthal SL, Zigler JE, Shellock JL, Ohnmeiss DD: Lumbar Total Disc Replacement Removals/Revisions during a 20 Year Experience with 1,775 Patients (best papers session). International Society for the Study of the Lumbar Spine. May, 2022; Boston, Massachusetts.
- 656. Guyer RD, Blumenthal SL, Zigler JE, Shellock JL, Ohnmeiss DD: Clinical Outcome of Lumbar Hybrid Surgery in a Consecutive Series of Patients with Long-term Follow-up. International Society for the Study of the Lumbar Spine. May, 2022; Boston, Massachusetts.
- 657. Guyer R: Case Discussions: L4-5 Grade 1-2 Isthmic Listhesis. State of Spine Surgery Think Tank. June, 2022; Los Cabos, Mexico.
- 658. Beall DP, Gershon S, Wilson GL, Guyer RD, Amirdelfan K, Davis T, Langhorst M, Tally W, DePalma MJ, Ganey T: Treatment of Degenerated Intervertebral Discs Using Viable Disc Tissue Allograft Supplementation in Patients with Chronic Discogenic Low Back Pain: 24-Month Results of the VAST Extension Study. International Society for the Advancement of Spine Surgery. June, 2022; Bahamas.
- 659. Sasso R, Hu S, Bae H, Villavicencio AT, Lavelle WF, Kim KD, Yoon ST, Adndhu HS, Perez-Cruet MJ, Bains RRS, KUO C, Stauff M, Gum JL, Deutsch H, Mermer M, Crandall D, Fischgrund J, Sethi K, Ray W, David R, Yu E, Wang M, Boody B, Berven S, Chapman J, Guyer RD, Hassanzadeh H, Fielding LC, Alamin T, Carragee E, Welch W: FDA Trial of Decompression and Dynamic Sagittal Tether for Degenerative Spondylolisthesis: 24-Months Clinical and Radiographic Follow-Up in 228 Patients. International Society for the Advancement of Spine Surgery. June, 2022; Bahamas.
- 660. Phillips FM, Coric D, Lanman TH, Lavelle WF, Milam A, Guyer RD, Pratt SR: 5-year Outcomes for Single-Level Total Disc Replacement with a Novel Viscoelastic Artificial Cervical Disc Compared to Anterior Cervical Discectomy and Fusion (ACDF). International Society for the Advancement of Spine Surgery. June, 2022; Bahamas.

- 661. Coric D, Guyer RD, Nunley P, Strenge KB, Boltes MO, Ohnmeiss DD: Imaging Outcome at 24-month Follow-up in a Prospective, Multicenter Study of Two-level Cervical Arthroplasty with a PEEK-on-Ceramic Artificial Disc. International Society for the Advancement of Spine Surgery. June, 2022; Bahamas.
- 662. Patwardhan AG, Havey RM, Phillips FM, Lanman TH, Zigler JE, Coric D, Guyer RD, Muriuki MG: Likelihood of Achieving Physiological Range of Motion After Cervical Disc Arthroplasty: Analysis of IDE Clinical Trial Data. International Society for the Advancement of Spine Surgery. June, 2022; Bahamas.
- 663. Guyer RD, Blumenthal SL, Zigler JE, Shellock JL, Ohnmeiss DD: Lumbar Total Disc Replacement Removals/Revisions during a 20 Year Experience with 1,775 Patients (best papers session). North American Spine Society. October, 2022; Chicago, Illinois.
- 664. Guyer RD, Blumenthal SL, Zigler JE, Shellock JL, Ohnmeiss DD: Clinical Outcome of Lumbar Hybrid Surgery in a Consecutive Series of Patients with Long-term Follow-up (best papers session). North American Spine Society. October, 2022; Chicago, Illinois.
- 665. Shahzad H, Elizabeth Yu E, Bhatti N, Sasso R, Hu S, Carragee E, Bae H, Perez-Cruet M, Villavicencio AT, Yoon T, Kim KD, Lavelle WF, Gum JL, Bains RS, Kuo CC, Sandhu HS, Stauff MP, Wang MY, Crandall DG, Berven SH, Deutsch H, Fischgrund JS, Ray WZ, Mermer M, Sethi K, Shimer AL, Davis RJ, Chapman JR, White AP, Guyer RD, Fielding LC, Alamin TF, Welch WC: Comparing 12-month Quality of Life, Work Status, and Disability Outcomes Between Decompression & Dynamic Sagittal Tether Stabilization vs Transforaminal Lumbar Interbody Fusion for the Management of Lumbar Degenerative Spondylolisthesis. Interim Results of an FDA IDE Study. Society for Minimally Invasive Spine Surgery. September-October, 2022; Las Vegas, Nevada.
- 666. Bae H, Sasso R, Hu S, Carragee E, Perez-Cruet M, Villavicencio AT, Yoon T, Kim KD, Lavelle WF, Gum JL, Bains RS, Kuo CC, Sandhu HS, Stauff, MP, Wang MY, Crandall DG, Berven SH, Deutsch H, Fischgrund JS, Ray WZ, Mermer M, Sethi K, Shimer AL, Davis RJ, Yu E, Chapman JR, White AP, Guyer RD, Fielding LC, Alamin TF, Welch WC: Decompression and Dynamic Sagittal Tether for Degenerative Spondylolisthesis: 24-month Pain, Disability and Reoperation Outcomes in 222 Patients from an FDA IDE Study. Society for Minimally Invasive Spine Surgery. September-October, 2022; Las Vegas, Nevada.
- 667. Coric D, Guyer RD, Bae H, Nunley PD, Strenge B, Peloza JH, Boltes MO, Ohnmeiss DD: Imaging Outcome at 24-month Follow-up in a Prospective, Multicenter Study of Two-level Cervical Arthroplasty with a PEEK-on-Ceramic Artificial Disc (best papers session). North American Spine Society. October, 2022; Chicago, Illinois.
- 668. Blumenthal SL, Guyer RD, Shellock JL, Zigler JE, Ohnmeiss DD: Lumbar Total Disc Replacement for the Treatment of Adjacent Segment Degeneration after Lumbar Fusion. North American Spine Society. October, 2022; Chicago, Illinois.
- 669. Coric D, Guyer RD, Bae H, Nunley PD, Strenge B, Peloza JH, Boltes MO, Ohnmeiss DD: Clinical Outcome of a Prospective, Controlled, Multicenter Study. North American Spine Society. October, 2022; Chicago, Illinois.

- 670. Patwardhan A, Havey R, Phillips F, Lanman, Coric D, Guyer RD, Muriuki M: Likelihood of Achieving Physiological Range of Motion after Cervical Disc Arthroplasty: Analysis of IDE Clinical Trial Data. North American Spine Society. October, 2022; Chicago, Illinois.
- 671. Lavelle W ,Sasso R, Hu W, Bae H, Yoon T, Villavicencio, Kim, Bains, Kuo, Stauff, Sandhu, Perez-Cruet, Berven S, Fischgrund, Deutsch, Hassanzadeh, Yu, Ray, Metkar, Chapman J, Guyer RD, Crandall, Gum, Wang, Alamin, Carragee E, Fielding, L Welch: Return to Work, Activities of Daily Living and Disability Improvement: Twelve-month Outcomes of an FDA IDE Trial of Decompression and Tension Band Stabilization for Degenerative Spondylolisthesis (best papers session). North American Spine Society. October, 2022; Chicago, Illinois.
- 672. Sasso R, Boody, Hu S, Bae H, Villavicencio, Lavelle W, Kim, Yoon T, Sandhu, Perez-Cruet, Bains, Kuo, Stauff, Gum, Deutsch, Crandall, Fischgrund, Ray, Yu, Wang, Berven S, Chapman J, Guyer RD, Fielding L: FDA Trial of Decompression and Dynamic Sagittal Tether for Degenerative Spondylolisthesis: 24 Months Clinical and Radiographic Follow-up. North American Spine Society. October, 2022; Chicago, Illinois.
- 673. Guyer RD: Incidence and Modes of Failure Seen Clinically. Symposium: Cervical Total Disc Replacement 2.0: When Do Things Go Wrong. North American Spine Society. October, 2022; Chicago, Illinois.
- 674. Patwardhan A, Havey R, Phillips F, Zigler J, Coric D, Guyer RD, Lanman T, Muriuki M: Prosthesis Design and Likelihood of Achieving Physiological Range of Motion After Cervical Disc Arthroplasty: Analysis of Data from Seven IDE Clinical Trials. Cervical Spine Research Society. November, 2022; San Diego, California.
- 675. Griffin C, Blumenthal SL, Zigler JE, Guyer RD, Shellock JL, Satin A, Ohnmeiss DD: Revisions and Removals of Cervical Total Disc Replacement Devices in a Single Institution Consecutive Series of 1,473 Patients Beginning with the First Case Experience in 2003. Cervical Spine Research Society. November, 2022; San Diego, California.
- 676. Guyer RD: What to Do First? Hip or Spine? Brussels International Spine Symposium. November, 2022; Brussels, Belgium.
- 677. Guyer RD, Coric D, Sasso R, Musacchio M, Bae H, Ohnmeiss D: Five-year Follow-up of a Prospective FDA IDE Trial Evaluating a PEEK-on-Ceramic Cervical Disc Replacement. AANS Spine Summit. March, 2023; Miami Beach, Florida.
- 678. Alamin TF, Carragee E, Hu SS, Gum JL, Yoon ST, Kim KD, Berven SH, Yu E, Fielding LC, Lavelle WF, Bains RS, Kuo CC, Shimer AL, Guyer RD, Fischgrund JS, Ray WZ, White AP, Deutch H, Chapman JR, Stauff MP, Sandhu H, Bae H: Decompression and Dynamic Sagittal Tether Stabilization vs TLIF for Degenerative Spondylolisthesis: 24-Month Follow-up from an FDA IDE Trial. SpineWeek. May, 2023; Melbourne, Australia.
- 679. Phillips FM, Coric D, Lanman T, Lavelle W, Milam A, Guyer RD, Pratt SR: 5-year Outcomes for Single-Level Total Disc Replacement with a Novel Viscoelastic Artificial Cervical Disc Compared to Anterior Cervical Discectomy and Fusion (ACDF). SpineWeek. May, 2023; Melbourne, Australia.
- 680. Guyer RD: Lumbar Disc Arthroplasty (part of NASS symposium: Procedural Management of Low Back Pain. SpineWeek. May, 2023; Melbourne, Australia.

- 681. Blumenthal SL, Guyer RD, Griffin C, Zigler JE, Shellock JL, Ohnmeiss DD, Courtois EC: Removals and Revisions of Cervical Total Disc Replacement Devices in a Consecutive Series of 1,473 Patients Beginning with the First Case Experience in 2003. SpineWeek (North American Spine Society section). May, 2023; Melbourne, Australia.
- 682. Guyer R: Axis Spine. State of Spine Surgery Think Tank. June, 2023; Los Cabos, Mexico.
- 683. Guyer R: Barriers That Must Be Overcome for LTDRs to Replace Fusions. State of Spine Surgery Think Tank. June, 2023; Los Cabos, Mexico.
- 684. Courtois EC, Ohnmeiss DD, Guyer RD: Assessing Lumbar Vertebral Bone Quality: A Methodological Evaluation of CT and MRI as Alternatives to Traditional DEXA. International Society for the Advancement of Spine Surgery. June, 2023, San Francisco, California.
- 685. Zigler JE, Shellock JL, Guyer RD, Blumenthal SL, Ohnmeiss DD: Outcome of 2-level Lumbar Total Disc Replacement: Results of a Long-term Follow-up Study. International Society for the Advancement of Spine Surgery. June, 2023, San Francisco, California.
- 686. Blumenthal SL, Griffin C, Courtois ECC, Guyer RD, Zigler JE, Shellock JL, Ohnmeiss DD: Incidence of Implant Removal or Revision Surgery after Cervical Total Disc Replacement in a Consecutive Series of 1,615 Patients Beginning with the First Case Experience in 2003. International Society for the Advancement of Spine Surgery. June, 2023, San Francisco, California.
- 687. Guyer RD: >2 Level CDR Case Success Stories. International Society for the Advancement of Spine Surgery. Part of symposium: Cervical Disc Replacement Pushing the Indications. June, 2023, San Francisco, California.
- 688. Guyer R: 23 Years of Disc Replacement in the United States. Orthopaedic Spine Emerging Technologies. September, 2023; Boston, Massachusetts.
- 689. Nunley PD, Guyer RD, Strenge KB, Patel A, Bae H, Khachatryan A, Park A, Yue J, Khalil J, Stone M: Thirty-six-Month Clinical Outcomes of a Prospective, Controlled, Multicenter Study Evaluating Two-Level Cervical Disc Arthroplasty with a PEEK-on-ceramic Artificial Disc. North American Spine Society. October, 2023; Los Angeles, California.
- 690. Zigler JE, Shellock JL, Guyer RD, Blumenthal SL, Ohnmeiss DD: Outcome of 2-level Lumbar Total Disc Replacement: Results of a Long-term Follow-up Study. North American Spine Society. October, 2023; Los Angeles, California.
- 691. Blumenthal SL, Guyer RD, Zigler JE, Shellock JL, Ohnmeiss DD: Long-term Outcome of Lumbar Total Disc Replacement: Impact of Prior Spine Surgery. North American Spine Society. October, 2023; Los Angeles, California.
- 692. Guyer RD, Coric D, Nunley PD, Sasso R, Musacchio M, Bae H, Ohnmeiss DD: Five-year Follow-up of a Prospective FDA IDE Trial Evaluating a PEEK-on-Ceramic Cervical Disc Replacement. North American Spine Society. October, 2023; Los Angeles, California.
- 693. Guyer RD: Clinical Outcome in 20+ Years' Literature (part of symposium: Lumbar Total Disc Replacement: Where We Are Today and How to Move Forward). North American Spine Society. October, 2023; Los Angeles, California.

- 694. Guyer RD: TDR in the Elderly, Brussels International Spine Symposium. November, 2023; Brussels, Belgium.
- 695. Guyer RD: Stenosis in the Elderly: To Fuse or Not. Brussels International Spine Symposium. November, 2023; Brussels, Belgium.
- 696. Guyer RD: The Aging Spine Surgeon? Brussels International Spine Symposium. November, 2023; Brussels, Belgium.
- 697. Guyer RD, Courtois EC, Ohnmeiss DD, Blumenthal SL, Shellock JL, Zigler JE,: Effect of Lumbar Total Disc Replacement on Sagittal Alignment. Spine Society of Australia. April, 2024; Sydney, Australia.
- 698. Blumenthal SL, Ohnmeiss DD, Courtois EC, Guyer RD, Shellock JE, Zigler JE: Strategies for Addressing Failed Cervical Total Disc Replacement: A Series of 42 Patients. Spine Society of Australia. April, 2024; Sydney, Australia.
- 699. Guyer, Blumenthal, Zigler, Shellock, Ohnmeiss DD: Clinical Outcome of Lumbar Total Disc Replacement in Patients More Than 60 Years of Age. Spine Society of Australia. April, 2024; Sydney, Australia.
- 700. Guyer RD, Ohnmeiss DD, Blumenthal SL, Courtois EC, Shellock JL, Zigler JE: Relationship of Discography to Re-Operation for Disc-Related Pain More Than 10 Years after Lumbar Total Disc Replacement. Spine Society of Australia. April, 2024; Sydney, Australia.
- 701. Blumenthal SL, Guyer RG, Zigler JE, Shellock SL, Ohnmeiss DD: Impact of Prior Lumbar Spine Surgery on the Long-term Outcome of Lumbar Total Disc Replacement. International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
- 702. Guyer RD, Blumenthal SL, Shellock JL, Zigler JE, Ohnmeiss DD: What Happened to Patients Who Received the Charite Lumbar Artificial Disc? International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
- 703. Guyer RD, Zigler JE, Blumenthal SL, Shellock JL, Ohnmeiss DD: Clinical Outcome of Lumbar Total Disc Replacement in Patients More Than 60 Years of Age. International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
- 704. Shellock JL, Guyer RD, Satin AM, Neeley OJ, Ohnmeiss DD: Anterior Lumbar Interbody Fusion for the Treatment of Failed Transforaminal Lumbar Interbody Fusion. International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
- 705. Ohnmeiss DD, Courtois EC, Guyer RD, Blumenthal SL, Shellock JS, Zigler JE: Relationship of Discography to Re-Operation for Disc-Related Pain More Than 10 Years after Lumbar Total Disc Replacement. International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
- 706. Ahn J, Courtois EC, Guyer RD, Ohnmeiss DD: Impact of Age on the Occurrence of Vascular Complications in Patients Undergoing Anterior Lumbar Approach Surgery. International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
- 707. Guyer RD, Shellock JL, Neeley OJ, Satin AM, Ohnmeiss DD: Anterior Lumbar Interbody Fusion for the Treatment of Failed Transforaminal Lumbar Interbody Fusion. International Society for the Study of the Lumbar Spine. May, 2024; Milan, Italy.

- 708. Guyer RD, Blumenthal SL, Shellock JL, Zigler JE, Ohnmeiss DD: What Happened to Patients Who Received the Charite Lumbar Artificial Disc? International Society for the Study of the Lumbar Spine. May, 2024; Milan, Italy.
- 709. Guyer RD: L5 Radiculopathy/palsy with ALIF—Underestimated Problem, and What Should We Do Differently? State of Spine Surgery Summit. June, 2024; Cabo, Mexico.
- 710. Guyer RD: Selecting the Appropriate Patient for Lumbar TDR and Outcomes, State of Spine Surgery Summit. June, 2024; Cabo, Mexico.
- 711. Guyer RD: Spine Surgery Should Be Done By Qualified, Trained Surgeons Daah, State of Spine Surgery Summit. June, 2024; Cabo, Mexico.
- 712. Guyer RD, Blumenthal SL, Shellock JL, Zigler JE, Ohnmeiss DD: What Happened to Patients Who Received the Charite Lumbar Artificial Disc? Spine Across the Sea. July, 2024; Kauai, Hawaii.
- 713. Ohnmeiss DD, Guyer RD, Blumenthal SL, Courtois EC, Shellock JS, Zigler JE: Relationship of Discography to Re-Operation for Disc-Related Pain More Than 10 Years after Lumbar Total Disc Replacement. Spine Across the Sea. July, 2024; Kauai, Hawaii.
- 714. Blumenthal SL, Guyer RG, Zigler JE, Shellock SL, Ohnmeiss DD: Long-term Outcome of Lumbar Total Disc Replacement: Impact of Prior Spine Surgery. Spine Across the Sea. July, 2024; Kauai, Hawaii.
- 715. Blumenthal SL, Ohnmeiss DD, Courtois EC, Guyer RD, Shellock JE, Zigler JE: Strategies for Addressing Failed Cervical Total Disc Replacement: A Series of 42 Patients. Spine Across the Sea. July, 2024; Kauai, Hawaii.
- 716. Satin AM, Shenker T, Guyer RD, Blumenthal S, Zigler J, Shellock J, Derman PB, Ohnmeiss DD, Rogers-LaVanne MP: Cervical Disc Arthroplasty for the Treatment of Adjacent Segment Disease after Anterior Cervical Discectomy and Fusion. Society for Minimally Invasive Spine Surgery. September, 2024; Las Vegas, Nevada.
- 717. Ohnmeiss DD, Courtois EC, Guyer RD, Blumenthal SL, Shellock JS, Zigler JE: Relationship of Discography to Re-Operation for Disc-Related Pain More Than 10 Years after Lumbar Total Disc Replacement. North American Spine Society. September, 2024; Chicago, Illinois.
- 718. Satin AM, Schenk T, Guyer RD, Blumenthal S, Zigler J, Shellock J, Derman PB, Ohnmeiss DD, Rogers-LaVanne MP: Cervical Disc Arthroplasty for the Treatment of Adjacent Segment Disease after Anterior Cervical Discectomy and Fusion. North American Spine Society. September, 2024; Chicago, Illinois.
- 719. Guyer RD: Lumbar Total Disc Replacement Complications. Brussels International Spine Symposium. November, 2024; Brussels, Belgium.
- 720. Guyer RD: Adjacent Level Degeneration: Fact or Fiction? Brussels International Spine Symposium. November, 2024; Brussels, Belgium.
- 721. Satin AM, Guyer RD, Qureshi S, Nemani V, Louie PK, Derman PB, Rogers-LaVanne MP: Surgeons' Views on Cervical Disc Arthroplasty for Elite Athletes: A Survey of Cervical Spine Research Society Members. Cervical Spine Research Society. December, 2024; Chicago, Illinois.

- 722. Satin AM, Guyer RD, Qureshi S, Nemani V, Louie PK, Derman PB, Rogers-LaVanne MP: Surgeons' Views on Cervical Disc Arthroplasty for Elite Athletes: A Survey of Cervical Spine Research Society Members. Cervical Spine Research Society. December, 2024; Chicago, Illinois.
- 723. Patwardhan A, Havey R, Muriuki M, Zigler J: Influence of Cervical Disc Prosthesis Design and 1- Versus 2-level Disc Replacements on ROM Outcomes 2-year Post Disc Arthroplasty in 835 Patients from 4 US IDE Clinical Trials. Cervical Spine Research Society. December, 2024; Chicago, Illinois.
- 724. Guyer RD, Nunley PD, Sasso RC, Patel A, Park A, Bae H, Ohnmeiss DD: Evaluation of Radiographically Relevant Heterotopic Ossification Following One-Level Cervical Disc Arthroplasty With A PEEK-on-Ceramic Artificial Disc. Cervical Spine Research Society. December, 2024; Chicago, Illinois.
- 725. Blumenthal S, Guyer R, Ohnmeiss D, Courtois E, Shellock J, Zigler J: Relationship of Discographic Injection Results to Subsequent Surgery in the Lumbar Spine with Minimum 10 Year Follow-Up. Spine Society of Australia. April, 2025; Perth, Australia.
- 726. Blumenthal S, Guyer R, Courtois E, Zigler J, Shellock J, Ohnmeiss D: Incidence of New Onset Leg Pain Following Anterior Approach Lumbar Surgery. Spine Society of Australia. April, 2025; Perth, Australia.
- 727. Guyer RD: Where Are We After 25 Years of Spinal Arthroplasty? International Society for the Advancement of Spine Surgery. April, 2025; Miami, Florida.
- 728. Ohnmeiss DD, Courtois EC, Guyer RD, Blumenthal SL, Shellock JL, Zigler JE: Relationship of Discographic Injection Results to Subsequent Surgery in the Lumbar Spine with Minimum 10 Year Follow-Up (Best Papers Session). International Society for the Advancement of Spine Surgery. April, 2025; Miami, Florida.
- 729. Guyer RD, Blumenthal SL, Wilson BA, Zigler JE, Shellock JL, Ohnmeiss DD: Outcomes of Lumbar Total Disc Replacement in Patients With Multiple Previous Discectomies. International Society for the Advancement of Spine Surgery. April, 2025; Miami, Florida.
- 730. Ohnmeiss D, Courtois E, Guyer R, Blumenthal S, Shellock J, Zigler J: Relationship of Discographic Injection Results to Subsequent Surgery in the Lumbar Spine with Minimum 10 Year Follow-Up. International Society for the Study of the Lumbar Spine. May, 2025; Atlanta, Georgia.
- 731. Guyer R, Blumenthal S, Courtois E, Zigler J, Shellock J, Ohnmeiss D: Incidence of New Onset Leg Pain Following Anterior Approach Lumbar Surgery. International Society for the Study of the Lumbar Spine. May, 2025; Atlanta, Georgia.
- 732. Guyer R, Blumenthal S, Courtois E, Shellock J, Zigler J, Ohnmeiss D: Changes in Sagittal Alignment Following Lumbar Total Disc Replacement: Analysis Based on Full-Body EOS Imaging of 132 Patients. International Society for the Study of the Lumbar Spine. May, 2025; Atlanta, Georgia.
- 733. Guyer R: Lumbar TDR: Still the Ugly Stepchild? State of Spine Surgery Think Tank. June, 2025; Cabo, Mexico.

- 734. Guyer RD: Spine Surgery Simulators for Surgical Training-If It's Good Enough for Pilots. Brussels International Spine Symposium. November, 2025; Antwerp, Belgium.
- 735. Guyer RD: Lumbar TDR- Will It Be Around in 10 Years? Brussels International Spine Symposium. November, 2025; Antwerp, Belgium.

## **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.
- 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.

- 59. Weinhoffer SL, Guyer RD, Griffith SL: In Vitro Intradiscal Pressure Measurements Above a Simulated Instrumented Fusion. International Society for the Study of the Lumbar Spine. June, 1994; Seattle, Washington.
- 60. Vanharanta H, Ohnmeiss DD, Guyer RD: The Value of Post-Discographic Lidocaine Injection. North American Spine Society; October, 1994; Minneapolis, Minnesota.
- 61. Block AR, Vanharanta H, Ohnmeiss DD, Guyer RD, Hochschuler SH: Discordant CT/Discography Results: Psychological Factors Play a Role. American Pain Society. November, 1994; Orlando, Florida.
- 62. Vanharanta H, Ohnmeiss DD, Guyer RD: Are Lumbar Flexion-Extension Films Useful in Identifying Discogenic Pain? American Academy of Orthopaedic Surgeons. February, 1995; Orlando, Florida.
- 63. Bogdanffy GM, Ohnmeiss DD, Guyer RD: The Relationship between Isometric Leg Function and Pain Distribution. American College of Sports Medicine. June, 1995; Minneapolis, Minnesota.
- 64. Bogdanffy GM, Kime C, Guyer RD: Percutaneous Lumbar Discectomy: A Comparison of Two Nuclear Aspiration Systems *In Vitro*. North American Spine Society. October, 1995; Washington, D.C.
- 65. Mason SL, Shelokov AP, Guyer RD, Ohnmeiss DD: Complications of Cervical Discography: Findings in a Large Series. Cervical Spine Research Society. November-December, 1995; Santa Fe, New Mexico.
- 66. Guyer RD, Wealtz M: The Effect of Posterior Instrumentation on In Vitro Cervical Intradiscal Pressure. Cervical Spine Research Society. November-December, 1995; Santa Fe, New Mexico.
- 67. Mason SL, Shelokov AP, Guyer RD, Ohnmeiss DD: Complications of Cervical Discography: Findings in a Large Series. American Academy of Orthopaedic Surgeons. February, 1996; Atlanta, Georgia.
- 68. Guyer RD, Ohnmeiss DD, Vanharanta H, Mason SL: Are Results of Lumbar and Cervical Discography Similar? International Society for the Study of the Lumbar Spine. June, 1996; Burlington, Vermont.
- 69. Gronblad M, Vanharanta H, Virri J, Rashbaum R, Guyer R, Rytomaa T, Karaharju EO: Cellular and Molecular Mechanisms in Degenerated Intervertebral Disc: An Immunohistochemical Study. International Society for the Study of the Lumbar Spine. June, 1996; Burlington, Vermont.
- 70. Block AR, Ware D, Ohnmeiss DD, Guyer RD: Initial Results from a Psycho-Social Screening Package for Spine Surgery Candidates. International Association for the Study of Pain. August, 1996; Vancouver, Canada.
- 71. Block AR, Ware D, Ohnmeiss DD, Guyer RD: Initial Results from a Psycho-Social Screening Package for Spine Surgery Candidates. North American Spine Society. October, 1996; Vancouver, Canada.

- 72. Araghi A, Guyer RD, Fulp RT, Ohnmeiss DD, Blumenthal SL, Hochschuler SH, Regan JJ, Shelokov AP, Rashbaum RF: Use of Morphine Paste for Pain Control in Lumbar Laminectomies. Spine + Science + Management; November, 1996; New Orleans, Louisiana.
- 73. Cartwright TJ, Guyer RD, Ohnmeiss DD, Fulp RT, Mason SL: Results of Anterior Fusion for Equivocal Pathology Clarified by Discography. Spine + Science + Management; November, 1996; New Orleans, Louisiana.
- 74. Guyer RD, Ohnmeiss DD, Vanharanta H, Mason SL: Are Results of Lumbar and Cervical Discography Similar? American Academy of Orthopaedic Surgeons. February, 1997; San Francisco, California.
- 75. Regan JJ, Mack M, Aronoff RJ, Guyer, RD, Blumenthal, SL, Ahrens JE, Ohnmeiss DD: Development of Video-Assisted Thoracoscopic Spine Surgery. (Scientific Exhibit) American Academy of Orthopaedic Surgeons. February, 1997; San Francisco, California.
- 76. Cartwright TJ, Guyer RD, Ohnmeiss DD, Fulp RT, Mason SL: Results of Anterior Fusion for Equivocal Pathology Clarified by Discography. Spine Across the Sea. March, 1997; Hawaii.
- 77. Araghi A, Guyer RD, Fulp RT, Ohnmeiss DD, Blumenthal SL, Hochschuler SH, Regan JJ, Shelokov AP, Zigler JE, Rashbaum RF: Use of Morphine Paste for Pain Control in Lumbar Laminectomies. International Society for the Study of the Lumbar Spine. June, 1997; Singapore.
- 78. Massoud B, Ohnmeiss DD, Rinn C, Guyer RD, Hochschuler SH, Rashbaum RF, Blumenthal SL, Zigler JE, Regan JJ, Fulp T: Results of Hardware Removal in the Lumbar Spine and the Role of Diagnostic Hardware Injection. Spine + Science + Management; November, 1997; New Orleans, Louisiana.
- 79. Hyde J, Ohnmeiss DD, Rinn C, Guyer RD, Rashbaum RF, Blumenthal SL, Zigler JE, Regan JJ, Fulp T: Anterior Cervical Fusion: Factors Related to Outcome. Spine + Science + Management; November, 1997; New Orleans, Louisiana.
- 80. Guyer RD: Inhibition of Postoperative Peridural Fibrosis with a Bioresorbable Carbohydrate Gel: ADCON-L. (Scientific Exhibit) American Academy of Orthopaedic Surgeons. March, 1998; New Orleans, Louisiana.
- 81. Massoud B, Ohnmeiss DD, Rinn C, Guyer RD, Hochschuler SH, Rashbaum RF, Blumenthal SL, Zigler JE, Regan JJ, Fulp T: Results of Hardware Removal in the Lumbar Spine and the Role of Diagnostic Hardware Injection. North American Spine Society. October, 1998; San Francisco, California.
- 82. Sengupta D, Ohnmeiss DD, Hyde J, Zigler JE, Regan JJ, Hochschuler SH, Fulp T, Guyer RD: Intrasegmental Repair of Pars Defect Early Results Using a Simple Technique. International Society for the Study of the Lumbar Spine. June, 1999; Kona, Hawaii.
- 83. Blumenthal SL, Simpson NS, Ohnmeiss DD, Risk DE Boehler S, Guyer RD, Zigler JE, Fulp T, Hochschuler SH: Anterior Lumbar Interbody Fusion with Threaded Fusion Cages. International Society for the Study of the Lumbar Spine. June, 1999; Kona, Hawaii.

- 84. Sengupta D, Ohnmeiss DD, Guyer RD, Hochschuler SH: Biomechanical Evaluation of Immediate Stability with Rectangular vs. Cylindrical Interbody Fusion Cages in Stabilization of the Lumbar Spine. International Society for the Study of the Lumbar Spine. June, 1999; Kona, Hawaii.
- 85. Block AR, Guyer RD, Ohnmeiss DD: Use of Presurgical Psychosocial Screening to Predict Spine Surgery Outcome. International Association for the Study of Pain. August, 1999; Vienna, Austria.
- 86. Ohnmeiss DD, Blumenthal SL, Guyer RD, Zigler JE, Hochschuler SH: Analysis of Threaded Fusion Cage Subsidence. North American Spine Society. October, 1999; Chicago, Illinois.
- 87. Blumenthal SL, Regan JJ, Hisey MS, Ohnmeiss DD, Guyer RD, Hochschuler SH, Zigler JE: Can Threaded Fusion Cages Be Used Effectively As Stand-Alone Devices? North American Spine Society. October, 1999; Chicago, Illinois.
- 88. Sengupta D, Ohnmeiss DD, Guyer RD, Hochschuler SH: Biomechanical Evaluation of Immediate Stability with Rectangular vs. Cylindrical Interbody Fusion Cages in Stabilization of the Lumbar Spine. North American Spine Society. October, 1999; Chicago, Illinois.
- 89. Blumenthal SL, Hisey MS, Ohnmeiss DD, Regan JJ, Guyer RD, Hochschuler SH, Zigler JE: Can Threaded Fusion Cages Be Used Effectively as Stand-Alone Devices? International Society for the Study of the Lumbar Spine. April, 2000; Adelaide, Australia.
- 90. Ohnmeiss DD, Blumenthal SL, Guyer RD, Hochschuler SH, Zigler JE: Can Foraminal Height be Increased and Maintained with Anterior Lumbar Interbody Fusion Using Cages? International Society for the Study of the Lumbar Spine. April, 2000; Adelaide, Australia.
- 91. Ohnmeiss DD, Blumenthal SL, Guyer RD, Zigler JE, Hochschuler SH: Analysis of Threaded Fusion Cage Subsidence. International Society for the Study of the Lumbar Spine. April, 2000; Adelaide, Australia.
- 92. Ohnmeiss DD, Blumenthal SL, Guyer RD, Hochschuler SH, Zigler JE: Can Foraminal Height be Increased and Maintained with Anterior Lumbar Interbody Fusion Using Cages? Spine Across the Sea. July, 2000; Kona, Hawaii.
- 93. Blumenthal SL, Hisey MS, Ohnmeiss DD, Regan JJ, Guyer RD, Hochschuler SH, Zigler JE: Can Threaded Fusion Cages Be Used Effectively as Stand-Alone Devices? Spine Across the Sea. July, 2000; Kona, Hawaii.
- 94. Sengupta D, Ohnmeiss DD, Hyde J, Zigler JE, Regan JJ, Hochschuler SH, Fulp T, Guyer RD: Intrasegmental Repair of Pars Defect –Results Using a Simple Technique. Spine Across the Sea. July, 2000; Kona, Hawaii.
- 95. Ohnmeiss DD, Blumenthal SL, Guyer RD, Zigler JE, Hochschuler SH: Analysis of Threaded Fusion Cage Subsidence. Spine Across the Sea. July, 2000; Kona, Hawaii.
- 96. Burton DC, Ohnmeiss DD, Blumenthal SL, Rashbaum RF, Zigler JE, Guyer RD, Regan JJ: Anterior Cervical Discectomy and Fusion with Allograft Bone and Plate Fixation. North American Spine Society. October, 2000; New Orleans, Louisiana.

- 97. Regan JJ, Ohnmeiss DD, Hochschuler SH, Blumenthal SL, Guyer RD: Comparison of Laparoscopic to Mini-open Fusion at the L4-5 Level. International Society for the Study of the Lumbar Spine. June, 2001; Edinburgh, Scotland.
- 98. Guyer RD, McAfee PC, Hochschuler SH, Blumenthal SL, Fedder I, Ohnmeiss DD: Prospective Evaluation of the SB Charité III Disc Prosthesis. North American Spine Society. November, 2001; Seattle, Washington.
- 99. Tran V, Ohnmeiss DD, Blumenthal SL, Chang Y, Guyer RD, Zigler JE, Hochschuler SH, Hisey MS: Analysis of Re-Operations When Using Cages as Stand-Alone Devices: Minimum Three Year Follow-Up Study. Spine + Science + Management; November, 2001; New Orleans, Louisiana.
- 100. Henry S, Ohnmeiss DD, Guyer RD, Zigler JE, Chang Y, Rashbaum RF, Blumenthal SL: Outcome of Anterior Cervical Fusion for Discographically Proven Pain. Spine + Science + Management. November, 2001; New Orleans, Louisiana.
- 101. Ferrara LA, Zigler JE, Guyer RD: In Vitro Evaluation of Facet Motion Following Anterior Interbody Fusion. Congress of Neurological Surgeons. September-October, 2001; San Diego, California.
- 102. Tran V, Ohnmeiss DD, Blumenthal SL, Chang Y, Guyer RD, Zigler JE, Hochschuler SH, Hisey MS, Rashbaum RF: Analysis of Re-Operations When Using Cages as Stand-Alone Devices: Minimum Three Year Follow-Up Study. Meeting of the Americas. April, 2002; New York, New York.
- 103. Henry S, Ohnmeiss DD, Guyer RD, Zigler JE, Chang Y, Rashbaum RF, Blumenthal SL: Outcome of Anterior Cervical Fusion for Discographically Proven Pain. American Spinal Injury Association and the IMSOP joint conference. May, 2002; Vancouver, Canada.
- 104. Tran V, Ohnmeiss DD, Blumenthal SL, Chang Y, Guyer RD, Zigler JE, Hochschuler SH, Hisey MS, Rashbaum RF: Analysis of Re-Operations When Using Cages as Stand-Alone Devices: Minimum Three Year Follow-Up Study. American Spinal Injury Association and the IMSOP joint conference. May, 2002; Vancouver, Canada.
- 105. Henry S, Ohnmeiss DD, Guyer RD, Zigler JE, Chang Y, Rashbaum RF, Blumenthal SL: Outcome of Anterior Cervical Fusion for Discographically Proven Pain. American Academy of Orthopaedic Surgeons. February, 2003; New Orleans, Louisiana.
- 106. Zigler JE, Chang Y, Ohnmeiss DD, Guyer RD: Open-Door Laminoplasty in the Treatment of Cervical Myelopathy. American Spinal Injury Association. April, 2003; Miami, Florida.
- 107. Ohnmeiss DD, Hochschuler SH, Guyer RD, Rashbaum RF, Blumenthal SL: Sleep Disturbances in Back Pain Patients. International Society for the Study of the Lumbar Spine. May, 2003; Vancouver, Canada.
- 108. Blumenthal SL, Guyer RD, Hochschuler SH, Ohnmeiss DD: Prospective Outcome Evaluation of a Total Disc Replacement. International Society for the Study of the Lumbar Spine. May, 2003; Vancouver, Canada.
- 109. Zigler JE, Guyer RD, Chang Y, Ohnmeiss DD: Open-Door Laminoplasty in the Treatment of Cervical Myelopathy. World Spine. August 2003; Chicago, Illinois.

- 110. Guyer RD, Henry S, Ohnmeiss DD, Zigler JE, Chang Y, Rashbaum RF, Blumenthal SL: Outcome of Anterior Cervical Fusion for Cervical Discogenic Pain with Confirmatory Discography. Cervical Spine Research Society. December, 2003; Scottsdale, Arizona.
- 111. Hochschuler SH, Whitaker C, Zigler JE, Guyer RD, Sachs BL, Blumenthal SL, Rashbaum RF, Ohnmeiss DD: Comparison of Return to Work Following Total Disc Arthroplasty vs. Fusion: A Prospective, Randomized Study. Spinal Arthroplasty Society. May, 2004; Vienna, Austria.
- 112. Gottlieb J, Sachs B, Guyer R, Zigler J, Rashbaum R, Hochschuler S, Blumenthal S, Ohnmeiss D: Comparison of Complications Associated with Lumbar Artificial Disc Replacement Versus Fusion at 2 Year Follow-up. International Society for the Study of the Lumbar Spine. June, 2004; Porto, Portugal.
- 113. Blumenthal S, McAfee P, Guyer R, Hochschuler S, Garcia R, Regan J, Ohnmeiss D: Randomized Controlled Trial of the Charité Artificial Disc vs. Fusion for Single-Level Degenerative Disc Disease: A Two-Year Follow-up Study. International Society for the Study of the Lumbar Spine. June, 2004; Porto, Portugal.
- 114. Guyer R, Zigler JE, Hochschuler S, Rashbaum RF, Hisey M: A Prospective Study Through an Investigational Device Exemption (IDE) Comparing a New Modular Cage with the BAK Cylindrical Cage for Anterior Lumbar Interbody Fusion: 49 Consecutively Operative Cases. International Meeting on Advanced Spinal Techniques (IMAST). July, 2004; Bermuda.
- 115. Regan J, McAfee PC, Guyer RD, Blumenthal S, Geisler F: Charité Artificial Disc Replacement Evaluation of the Learning Curve and Complications I a Multicenter Prospective Randomized Controlled FDA IDE Trial. North American Spine Society. October, 2004; Chicago, Illinois.
- 116. Ohnmeiss DD, Guyer RD: 24 Month Follow-up for Reporting Results of Spinal Surgery Studies: Is This Guideline Supported by the Literature? International Society for the Study of the Lumbar Spine. May, 2005; New York, New York
- 117. Araghi A, Guyer RD, Hisey MS, Bradley WD, Sama A, Sukovich W, Hardenbrook M: Evaluation of a Novel Hydrosurgery System for Disc Preparation in Lumbar Interbody Fusion in a Cadaver Model. International Meeting on Advanced Spine Techniques (IMAST). July, 2005; Banff, Alberta, Canada.
- 118. Guyer R, Tromanhauser S, Toselli R: An Economic Analysis of Lumbar Total Disc Replacement vs. Fusion. North America Spine Society. Sept-Oct, 2005; Philadelphia, Pennsylvania.
- 119. Guyer R, Tromanhauser S, Toselli R: An Economic Analysis of Lumbar Total Disc Replacement vs. Fusion. American Association of Neurological Surgeons and Congress of Neurological Surgeons Section on Disorders of the Spine and Peripheral Nerves. March, 2006; Lake Buena Vista, Florida
- 120. Musante D, Guyer RD: Prospective Randomized Controlled Trial of Kineflex Versus Charité in Lumbar Total Disc Arthroplasty: 3 to 9 Month Follow-up. Spine Arthroplasty Society. May, 2006; Montreal, Canada.

- 121. Araghi A, Bradley W, Guyer R, Hardenbrook M, Hisey M, Sukovich W, Taddonio R: Efficacy of Disc Space Preparation for Transforaminal Lumbar Interbody Fusion: A Comparative Study of a Novel Hydrosurgical Technique to Conventional Methods in a Cadaver Model. Spine Arthroplasty Society. May, 2006; Montreal, Canada.
- 122. Lhamby J, Guyer R, Zigler J, Blumenthal S, Sachs B, Hochschuler S, Rashbaum R, Ohnmeiss D: Patients Undergoing Total Disc Replacement with Spinal Fusion at Different Lumbar Levels. Spine Arthroplasty Society. May, 2006; Montreal, Canada.
- 123. Ohnmeiss DD, Blumenthal SL, Guyer RD, Hochschuler SH: Analysis of Change in Outcome Measures at Various Follow-Up Periods: Data from a Prospective Trial. Spine Arthroplasty Society. May, 2006; Montreal, Canada.
- 124. Siddiqui S, Guyer R, Zigler J, Ohnmeiss D, Blumenthal S, Sachs B, Hochschuler S, Rashbaum R: Factors Related to the 20 Best and 20 Worst 24-month Outcomes of Total Disc Replacement in Prospective Trials. International Society for the Study of the Lumbar Spine. June, 2006; Bergen, Norway.
- 125. Guyer R, Blumenthal S, Geisler R, McAfee P, J Regan J: The First Year Following FDA Approval of the Charité Artificial Disc: "Real World" Adverse Events Outside an IDE Study Environment. International Society for the Study of the Lumbar Spine. June, 2006; Bergen, Norway.
- 126. Blumenthal SL, Guyer RD, Geisler FH, McAfee PC: One-Level Lumbar Arthroplasty in Patients 18-45 Years of Age vs. Patients 46-60 Years of Age: Is There a Difference in Clinical Outcome? International Meeting on Advanced Spine Techniques (IMAST). July, 2006; Athens, Greece.
- 127. Blumenthal SL, Ohnmeiss DD, Lhamby JL, Hochschuler SH, Zigler JE, Guyer RD, Sachs BL, Rashbaum RF: Patients Undergoing Total Disc Replacement with Spinal Fusion at Different Lumbar Levels. International Meeting on Advanced Spine Techniques (IMAST). July, 2006; Athens, Greece.
- 128. Hochschuler SH, Ohnmeiss DD, Blumenthal SL, Guyer RD: Results of Two-Level Total Disc Replacement Using CHARITÉ Artificial Disc. International Meeting on Advanced Spine Techniques (IMAST). July, 2006; Athens, Greece.
- 129. Ohnmeiss DD, Hochschuler SH, Blumenthal SL, Guyer RD: analysis of Change in Outcome Measures at Various Follow-Up Periods: Data from a Prospective Trial. International Meeting on Advanced Spine Techniques (IMAST). July, 2006; Athens, Greece.
- 130. Ohnmeiss DD, Hochschuler SH, Guyer RD: Analysis of Lumbar Disc-Related Pain Mechanisms. International Meeting on Advanced Spine Techniques (IMAST). July, 2006; Athens, Greece.
- 131. McAfee PC, Geisler FH, Blumenthal SL, Guyer RD, Regan J, Stadlan N, Dabbah M, Siddiqi F, Hayes V, Ohnmeiss DD: Predicted 5-year Survivorship of the CHARITÉ Artificial Disc vs. Anterior Lumbar Interbody Fusion: A Kaplan-Meyer Analysis. International Meeting on Advanced Spine Techniques (IMAST). July, 2006; Athens, Greece.

- 132. Jenis LG, Banco RJ, Tromanhauser SG, Bitan FD, Hochschuler SH, Guyer RD, Holt RT, Majd ME, McAfee PC, Regan J: Return-to-Work Following Treatment with CHARITÉ Artificial Disc versus Anterior Lumbar Interbody Fusion in Patients with Degenerative Disc Disease. International Meeting on Advanced Spine Techniques (IMAST). July, 2006; Athens, Greece.
- 133. Guyer RD, Banco RJ, Bitan FD, Blumenthal SL, Cappucino A, Geisler FH, Hochschuler SH, Holt RT, Jenis, MD, Majd ME, McAfee PC, Mullin BB, Regan JJ, Stadlan N, Tromanhauser SG, Wong D. Lumbar Arthroplasty vs. Anterior Interbody Fusion at One-Level: Clinical Results at 5-Year Follow-Up from the IDE Study of the Charité Artificial Disc. North American Spine Society. September, 2006; Seattle, Washington.
- 134. Blumenthal SL, Guyer RD, Geisler FH, McAfee PC, Regan JJ. The First Year Following FDA Approval of the Charité Artificial Disc: "Real World" Adverse Events Outside an IDE Study Environment. North American Spine Society. September, 2006; Seattle, Washington.
- 135. Lhamby J, Blumenthal SL, Guyer RD, Zigler JE, Ohnmeiss DD, Sachs BL, Hochschuler SH, Rashbaum RF. Patients Undergoing Total Disc Replacement with Spinal Fusion at Different Lumbar Levels. North American Spine Society. September, 2006; Seattle, Washington.
- 136. Zigler JE, Guyer R, Gill K, Balderson B, Cammisa F, Linovitz R: Two-year Follow-up from 5 Centers Participating in the ProDisc-C IDE Trial. Cervical Spine Research Society. November-December, 2006; Palm Beach, Florida.
- 137. Geisler FH, Guyer RD, Blumenthal SL, McAfee PC, Cappuccino A, Bitan F, Regan JJ: Patient Selection for Lumbar Arthroplasty and Arthrodesis: The Crossover Effect in a Controlled, Multi-Center, Randomized Study. Congress of Neurological Surgeons/American Association of Neurological Surgeons Section on Disorders of the Spine and Peripheral Nerves. April, 2007; Washington, D.C.
- 138. Ohnmeiss DD, Guyer RD, Rashbaum RF: What Constitutes Success in Lumbar Spine Surgery? Spine Arthroplasty Society. May, 2007; Berlin, Germany.
- 139. Blumenthal SB, Zigler JE, Guyer RD, Ohnmeiss DD: Comparison of Charité vs. ProDisc for the Treatment of Single-level Symptomatic Disc Degeneration: Prospective Data from One Center. Spine Arthroplasty Society. May, 2007; Berlin, Germany.
- 140. Guyer RD, Blumenthal SL, Hochschuler SH, Ohnmeiss DD: A Prospective Randomized Study Comparing Two Lumbar Total Disc Replacement Devices. Spine Arthroplasty Society. May, 2007; Berlin, Germany.
- 141. Roybal R, Hisey MS, Zigler JE, Sachs BL, Rashbaum RF, Guyer RD, Ohnmeiss DD: Minimally Invasive Pedicle Screw Placement: A Comparison to Open Surgery. Spine Arthroplasty Society. May, 2007; Berlin, Germany.
- 142. Rohan MX, 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. Spine Arthroplasty Society. May, 2007; Berlin, Germany.

- 143. Geisler FH, Guyer RD, Blumenthal SL, McAfee PC, Cappuccino A, Bitan F, Regan JJ: Patient Selection for Lumbar Arthroplasty and Arthrodesis: The Crossover Effect in a Controlled, Multi-Center, Randomized Study. Spine Arthroplasty Society. May, 2007; Berlin, Germany.
- 144. McAfee PC, Cunningham B, Geisler FH, Guyer RD, Regan JJ, Blumenthal SL, Cappuccino A: Correlation of the Global Range of Motion (L3 to S1) between In Vitro Benchtop ROM and Clinical ROM from the Charité Artificial Disc FDA Level I Data. Spine Arthroplasty Society. May, 2007; Berlin, Germany.
- 145. Guyer RD, Blumenthal SL, McAfee PC, Geisler F. The Effect of Age on Outcomes in Patients with One-level Arthroplasty. Spine Arthroplasty Society. May, 2007; Berlin, Germany.
- 146. Roybal R, Hisey MS, Zigler JE, Sachs BL, Rashbaum RF, Guyer RD, Ohnmeiss DD: Minimally Invasive Pedicle Screw Placement: A Comparison to Open Surgery. International Society for the Study of the Lumbar Spine. June, 2007; Hong Kong, China.
- 147. Guyer RD, Blumenthal SL, Hochschuler SH, Ohnmeiss DD: A Prospective Randomized Study Comparing Two Lumbar Total Disc Replacement Devices. International Society for the Study of the Lumbar Spine. June, 2007; Hong Kong, China.
- 148. Blumenthal SL, Zigler JE, Guyer RD, Ohnmeiss DD: Similarities and Differences in Clinical and Radiographic Outcomes of Two US IDE Trials for Lumbar Disc Replacement. International Society for the Study of the Lumbar Spine. June, 2007; Hong Kong, China.
- 149. Ohnmeiss DD, Guyer RD, Rashbaum RF: What Constitutes Success in Lumbar Spine Surgery? International Meeting on Advanced Spinal Techniques (IMAST). July, 2007; Paradise, Bahamas.
- 150. Yakel D, Guyer RD, Zigler JE, Ohnmeiss DD: Complications, Re-operations, and Outcome of Anterior Cervical Fusion Using Plates. World Spine. July, 2007; Istanbul, Turkey.
- 151. Rohan MX, 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. North American Spine Society. October, 2007; Austin, Texas.
- 152. Guyer RD, Blumenthal SL, Hochschuler SH, Ohnmeiss DD: A Prospective Randomized Study Comparing Two Lumbar Total Disc Replacement Devices. North American Spine Society. October, 2007; Austin, Texas.
- 153. Ohnmeiss D, Guyer R, Blumenthal S, Hochschuler S: Analysis of Total Disc Replacement Data with Respect to Published MCID (Minimal Clinically Important Difference) Values. North American Spine Society. October, 2007; Austin, Texas.
- 154. McAfee PC, Cunningham BW, Geisler F, Guyer RD, Blumenthal SL, Cappuccino A, Regan JJ: A Comparison of in Vivo and in Vitro Range of Motion Distribution Following One-Level Lumbar Arthroplasty -2 to 5 year Radiographic Follow up of 375 Consecutive Patients Enrolled in the CHARITÉ Artificial Disc FDA Level I Pivotal Trial. North American Spine Society. October, 2007; Austin, Texas.

- 155. Lieberman I, Hardenbrook M, Wang J, Guyer R, Khanna J: Radiation Exposure Using Miniature Robotic Guidance for Spinal Surgery. North American Spine Society. October, 2007; Austin, Texas.
- 156. Guyer R, Lauryssen C, Blumenthal B: Cervical Total Disc Replacement: A Prospective Randomized Comparison to Fusion. Asian Pacific Spine Arthroplasty Society. January, 2008; Seoul, South Korea.
- 158. Geisler FH, Guyer RD, McAfee PC, Regan JJ, Blumenthal SL, Majd ME, Holt RT, Banco RJ: Prospective, Randomized, Multicenter FDA IDE Study of CHARITÉ Artificial Disc vs. Lumbar Fusion: Effect at 5-year Follow-up of Prior Discectomy on Clinical Outcomes Following Lumbar Arthroplasty. Congress of Neurological Surgeons/American Association of Neurological Surgeons. February, 2008; Orlando, Florida.
- 159. Araghi A, Hisey MS, Zigler JE, Guyer RD, Sachs BL, Rashbaum RF, Ohnmeiss DD: Comparison of Open vs. Minimally Invasive Surgical Technique for Posterior Lumbar Fusion. Spine Arthroplasty Society. May, 2008; Miami, Florida.
- 160. Araghi A, Hisey MS, Zigler JE, Guyer RD, Sachs BL, Rashbaum RF, Ohnmeiss DD: Comparison of Open vs. Minimally Invasive Surgical Technique for Posterior Lumbar Fusion. Congress of Neurological Surgeons/American Association of Neurological Surgeons Section on Disorders of the Spine and Peripheral Nerves. February, 2008; Orlando, Florida.
- 161. Blumenthal SL, Bitan FD, Cappuccino A, Geisler FH, Guyer RD, McAfee PC: A New Registry for the Advancement of Arthroplasty: The Center for Arthroplasty Research and Education (CARES). Spine Arthroplasty Society. May, 2008; Miami, Florida.
- 162. Guyer RD, Lauryssen C, Blumenthal SL: A Prospective Randomized Study Comparing Cervical Total Disc Replacement to Fusion. Spine Arthroplasty Society. May, 2008; Miami, Florida.
- 163. Guyer RD: A Clinical Evaluation of Anular Repair Post Lumbar Discectomy. Spine Arthroplasty Society. May, 2008; Miami, Florida.
- 164. McAfee PC, Banco RJ, Blumenthal SL, Geisler FH, 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 on Clinical outcomes following lumbar arthroplasty. Spine Arthroplasty Society. May, 2008; Miami, Florida.
- 165. Ohnmeiss DD, Guyer RD, Blumenthal SL, Hochschuler SH: Analysis of Total Disc Replacement Outcomes When Applying MCID (Minimal Clinically Important Difference) Criteria. Spine Arthroplasty Society. May, 2008; Miami, Florida.
- 166. Roush TF, Blumenthal SL, Guyer RD, Ohnmeiss DD: Analysis of Hybrid (Total Disc Replacement / Fusion Constructs) in the Lumbar Spine: A Comparison with Two-Level Total Disc Replacement. Spine Arthroplasty Society. May, 2008; Miami, Florida.
- 167. Ohnmeiss DD, Guyer RD, Blumenthal SL, Hochschuler SH: Analysis of Total Disc Replacement Outcomes When Applying MCID (Minimal Clinically Important Difference) Criteria. International Society for the Study of the Lumbar Spine. May 2008; Geneva, Switzerland.

- 168. Roush TF, Blumenthal SL, Guyer RD, Ohnmeiss DD: Analysis of Hybrid (Total Disc Replacement/Fusion Constructs) in the Lumbar Spine: A Comparison with Two-level Total Disc Replacement. North American Spine Society SpineWeek. May 2008; Geneva, Switzerland.
- 169. Guyer RD, McAfee PC, Banco RJ, Bitan F, Cappuccino A, Geisler FH, Hochschuler SH, Jenis LG, Regan JJ, Blumenthal SL: Prospective, Randomized, Multi-center Food and Drug Administration Investigational Device Exemption Study of Lumbar Total Disc Replacement with the Charité Artificial Disc versus Lumbar Fusion. Eurospine. May, 2008; Geneva, Switzerland.
- 170. Hardenbrook M, Lieberman I, Khanna AJ, Guyer RD, Wan J: Accuracy, Radiation and Procedure Time Efficacy of Miniature Robotic Guidance in Spinal Surgery. Eurospine. May, 2008; Geneva, Switzerland.
- 171. Banco RJ, Geisler FH, Guyer RD, Hetzell BM, Holt RT, Majd ME: Prospective, Randomized, Multi-center FDA IDE Study of Charité Artificial Disc vs. Lumbar Fusion: Effect at 5-year Follow-up of Age on Clinical Outcomes Following Lumbar Arthroplasty. Eurospine. May, 2008; Geneva, Switzerland.
- 172. Wong DC, Jenis LG MD, 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? International Meeting on Advanced Spinal Techniques (IMAST). July, 2008; Hong Kong, China.
- 173. Guyer RD, Geisler FH, Majd ME, Holt RT, Regan JJ, Blumenthal SL, Wong DC, Jenis LG, Banco RJ: The Impact of Preoperative DEXA Scores Following Arthroplasty on Long-term Clinical and Radiographic Outcomes a 5-Year Follow-up Study. International Meeting on Advanced Spinal Techniques (IMAST). July, 2008; Hong Kong, China.
- 174. Blumenthal S, Zigler J, Guyer R, Waldrip A, Ohnmeiss D: A Prospective Randomized Comparison of Cervical Disc Replacement and Anterior Cervical Fusion. North American Spine Society. October, 2008; Toronto, Canada.
- 175. Majd M, Holt R, Guyer RD, Banco R, Geisler F, Jenis L, Regan J, Wong D, Blumenthal S: Two- and Five-year Lumbar Index-level Motion Following Arthroplasty: Impact of Heterotopic Ossification. North American Spine Society. October, 2008; Toronto, Canada.
- 176. Guyer RD, Geisler F, Holt RT, Majd M, Regan J, Wong D, Jenis L, Banco R, Blumenthal S, Demuth G, Hetzell B: The Impact of Postoperative Disc Height following Arthroplasty on Long-term Clinical and Radiographic Outcomes a 5-Year Follow-up Study. North American Spine Society. October, 2008; Toronto, Canada.
- 177. Guyer RD, Lauryssen C, Blumenthal S: Prospective Randomized Study Comparing Cervical Total Disc Replacement to Anterior Cervical Fusion. North American Spine Society. October, 2008; Toronto, Canada.
- 178. Guyer RD, Blumenthal SL, Zigler JE, Waldrip AM, Ohnmeiss DD: A Prospective Randomized Comparison of Cervical Disc Replacement and Anterior Cervical Fusion. Cervical Spine Research Society. December, 2008; Austin, Texas.

- 179. Guyer RD, Lauryssen C, Blumenthal SL: Cervical Total Disc Replacement: A Prospective, Randomized Comparison to Anterior Cervical Fusion. Cervical Spine Research Society. December, 2008; Austin, Texas.
- 180. Majd M, Holt R, Guyer RD, Banco R, Geisler F, Jenis L, Regan J, Wong D, Blumenthal S, Ohnmeiss DD: Two- and Five-year Lumbar Index-level Motion Following Arthroplasty: Impact of Heterotopic Ossification. American Association of Neurological Surgeons / Congress of Neurological Surgeons. March, 2009; Phoenix, Arizona.
- 181. Wong DC, Jenis LG, Guyer RD, Banco RJ, Geisler FH, Holt RT, Majd ME, Regan JJ, Blumenthal SL, DeMuth GE, Hetzell BC, Ohnmeiss DD: Is Preoperative Disc Height a Contributing Factor in 5-year Success Rate with Arthrodesis and Arthroplasty? American Association of Neurological Surgeons / Congress of Neurological Surgeons. March, 2009; Phoenix, Arizona.
- 182. Guyer RD, Geisler FH, Majd ME, Holt RT, Regan JJ, Blumenthal SL, Wong DC, Jenis LG, Banco RJ, Ohnmeiss DD: The Impact of Preoperative DEXA Scores Following Arthroplasty on Long-term Clinical and Radiographic Outcomes a 5-Year Follow-up Study. American Association of Neurological Surgeons / Congress of Neurological Surgeons. March, 2009; Phoenix, Arizona.
- 183. Guyer RD, Geisler F, Holt RT, Majd M, Regan J, Wong D, Jenis L, Banco R, Blumenthal S, Demuth G, Hetzell B, Ohnmeiss DD: The Impact of Postoperative Disc Height following Arthroplasty on Long-term Clinical and Radiographic Outcomes a 5-Year Follow-up Study. American Association of Neurological Surgeons / Congress of Neurological Surgeons. March, 2009; Phoenix, Arizona.
- 184. Guyer RD, Rodriguez M, Blumenthal SL, Zigler JE, Atanasov AM, Ohnmeiss DD: A Prospective Randomized Comparison of Cervical Disc Replacement and Anterior Cervical Fusion. Spine Arthroplasty Society. April, 2009; London, England
- 185. Guyer RD, Auer PB, Zigler JE, Blumenthal SL, Ohnmeiss DD: Relationship between Endplate Morphology and Clinical Outcome of Single-Level Lumbar Disc Arthroplasty. Spine Arthroplasty Society. April, 2009; London, England.
- 186. Guyer RD, Geisler FH, Majd ME, Holt RT, Regan JJ, Blumenthal SL, Wong DC, Jenis LG, Banco RJ: The Impact of Preoperative DEXA Scores Following Arthroplasty on Long-term Clinical and Radiographic Outcomes A 5-Year Follow-up Study. Spine Arthroplasty Society. April, 2009; London, England.
- 187. Guyer RD, Geisler FH, Holt RT, Majd ME, Regan JJ, , Wong DC, Jenis LG, Banco RJ, Blumenthal SL, DeMuth G, Hetzell BH: The Impact of Postoperative Disc Height following Arthroplasty on Long-term Clinical and Radiographic Outcomes a 5-Year Follow-up Study. Spine Arthroplasty Society. April, 2009; London, England.
- 188. Ohnmeiss DD, Waldrip A, Blumenthal S, Zigler J, Guyer RD: Cervical Total Disc Replacement: Is It Effective in Treating Patients' Greatest Self-reported Functional Limitations? Spine Arthroplasty Society. April, 2009; London, England.

- 189. 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 Arthroplasty Society. April, 2009; London, England.
- 190. Block AR, Austin S, Ohnmeiss DD: Presurgical Psychological Screening in Total Disc Replacement Patients. Spine Arthroplasty Society. April, 2009; London, England.
- 191. Li B, Guyer RD, Blumenthal S, Zigler J, Ohnmeiss DD: Is Pre-operative Disc Height Related to Lumbar Total Disc Replacement Outcome? Spine Arthroplasty Society. April, 2009; London, England.
- 192. Kicinski S, Guyer RD, Zigler JE, Verma-Kurvari S, Ohnmeiss DD: Sacroiliac Joint Dysfunction in Patients Enrolled in Lumbar Total Disc Replacement Trials. Spine Arthroplasty Society. April, 2009; London, England.
- 193. Guyer RD, Geisler FH, Holt RT, Majd ME, Regan JJ, Wong DC, Jenis LG, Banco RJ, Blumenthal SL, DeMuth G, Hetzell BH: The Impact of Postoperative Disc Height Following Arthroplasty on Long-term Clinical and Radiographic Outcomes a 5-Year Follow-up Study. Spine Society of Australia. April, 2009; Brisbane, Australia.
- 194. Guyer RD, Geisler FH, Majd ME, Holt RT, Regan JJ, Blumenthal SL, Wong DC, Jenis LG, Banco RJ: The Impact of Preoperative DEXA Scores Following Arthroplasty on Long-term Clinical and Radiographic Outcomes a 5-Year Follow-up Study. Spine Society of Australia. April, 2009; Brisbane, Australia.
- 195. Block AR, Austin S, Ohnmeiss DD: Presurgical Psychological Screening in Total Disc Replacement Patients. International Society for the Study of the Lumbar Spine. May, 2009; Miami, Florida.
- 196. Li B, Guyer RD, Blumenthal S, Zigler J, Ohnmeiss DD: Is Pre-operative Disc Height Related to Lumbar Total Disc Replacement Outcome? International Society for the Study of the Lumbar Spine. May, 2009; Miami, Florida.
- 197. Guyer RD, Cappuccino A, Blumenthal SL: 24-month Follow-up of a Prospective Randomized Comparison of Two Lumbar Total Disc Replacements. International Society for the Study of the Lumbar Spine. May, 2009; Miami, Florida.
- 198. 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 Four Collected Cases. International Society for the Study of the Lumbar Spine. May, 2009; Miami, Florida.
- 199. Zigler JE, Guyer RD, Ohnmeiss DD, Blumenthal SL: Anterior Re-operation at the Same Level Following Lumbar Total Disc Replacement. International Society for the Study of the Lumbar Spine. May, 2009; Miami, Florida.
- 200. Guyer RD, Auer PB, Zigler JE, Ohnmeiss DD, Blumenthal SL: Relationship between Endplate Morphology and Clinical Outcome of Single-Level Lumbar Disc Arthroplasty. . International Meeting on Advanced Spine Techniques (IMAST). July, 2009; Vienna; Austria.

- 201. Guyer RD, Pettine K, Knight RQ, Coric D, McAfee PC, Gordon CR, Cappuccino A, Buckley RA, Nunley P, Geisler FH, Peppers TA, Rappaport JR, Lauryssen C: Direct Compression of Two Lumbar Total Disc Replacement Devices: Results from a Prospective, Randomized, Multicenter FDA-Regulated Trial. International Society for the Study of the Lumbar Spine. April, 2010; Auckland, New Zealand.
- 202. Guyer RD, Pettine K, Knight RQ, Coric D, McAfee PC, Gordon CR, Cappuccino A, Buckley RA, Nunley P, Geisler FH, Peppers TA, Rappaport JR, Lauryssen C: Radiographic Comparison of Two Lumbar Total Disc Replacement Devices: Results from a Prospective, Randomized, Controlled, Multicenter FDA-Regulated Trial. International Society for the Study of the Lumbar Spine. April, 2010; Auckland, New Zealand.
- 203. Ohnmeiss DD, Guyer RD, Blumenthal SL: Analysis of Change in Scores in commonly used Outcome Measures: What can We Legitimately Assume about the Stability of Individual Patient Scores Based on Group Mean Scores? International Society for the Study of the Lumbar Spine. April, 2010; Auckland, New Zealand.
- 204. Blumenthal SL, Ohnmeiss DD, Guyer RD, Zigler JE: Intra-Operative Conversion of Attempted Lumbar Total Disc Replacement to Fusion: Incidence and Causes. International Society for the Study of the Lumbar Spine. April, 2010; Auckland, New Zealand.
- 205. 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. International Society for the Study of the Lumbar Spine. April, 2010; Auckland, New Zealand.
- 206. Blumenthal SL, Rainey S, Zigler JE, Guyer RD, Ohnmeiss DD: Analysis of Adjacent Segment Re-Operation Following Lumbar Total Disc Replacement. International Society for the Study of the Lumbar Spine. April, 2010; Auckland, New Zealand.
- 207. Ohnmeiss DD, Hume CS, Guyer RD, Zigler JE, Blumenthal SL: Cost Comparison of Total Disc Replacement vs. Fusion in Patients with Insurance Denial for Disc Replacement. International Society for the Study of the Lumbar Spine. April, 2010; Auckland, New Zealand.
- 208. Blumenthal SL, Guyer RD: Anular Repair after Lumbar Discectomy: Preliminary Observations from an Ongoing, Prospective, Randomized, Controlled Clinical Trial. Spine Society of Australia. April, 2010; Christchurch, New Zealand.
- 209. Ohnmeiss DD, Guyer RD, Blumenthal SL: Analysis of Change in Scores in Commonly Used Outcome Measures: What Can We Legitimately Assume about the Stability of Individual Patient Scores Based on Group Mean Scores? Spine Arthroplasty Society. April, 2010; New Orleans, Louisiana.
- 210. Guyer RD, Pettine K, Knight RQ, Coric D, McAfee PC, Gordon CR, Cappuccino A, Buckley RA, Nunley P, Geisler FH, Peppers TA, Rappaport JR, Lauryssen C: Direct Comparison of Two Lumbar Total Disc Replacement Devices: Results from a Prospective, Randomized, Multicenter FDA-Regulated Trial. Spine Arthroplasty Society. April, 2010; New Orleans, Louisiana.

- 211. Guyer RD, Pettine K, Knight RQ, Coric D, McAfee PC, Gordon CR, Cappuccino A, Buckley RA, Nunley P, Geisler FH, Peppers TA, Rappaport JR, Lauryssen C: Radiographic Comparison of Two Lumbar Total Disc Replacement Devices: Results from a Prospective, Randomized, Controlled Multicenter FDA-Regulated Trial. Spine Arthroplasty Society. April, 2010; New Orleans, Louisiana.
- 212. Guyer RD, Ohnmeiss DD, Blumenthal SL: Lumbar Total Disc Replacement: Results of a Comprehensive Review of Clinical Outcomes, Radiographic Measures, and Complications/Re-Operations. Spine Arthroplasty Society. April, 2010; New Orleans, Louisiana.
- 213. 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 Arthroplasty Society. April, 2010; New Orleans, Louisiana.
- 214. Blumenthal SL, Ohnmeiss DD, Zigler JE, Guyer RD: Intra-Operative Conversion of Attempted Lumbar Total Disc Replacement to Fusion: Incidence and Causes. Spine Arthroplasty Society. April, 2010; New Orleans, Louisiana.
- 215. 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. Spine Arthroplasty Society. April, 2010; New Orleans, Louisiana.
- 216. Glenn JS, Guyer RD: Anterior Discectomy and Total Disc Replacement for Patients with Third and Fourth Recurrent Lumbar Disc Herniations. Spine Arthroplasty Society. April, 2010; New Orleans, Louisiana.
- 217. Blumenthal SL, Rainey S, Guyer RD, Zigler JE, Ohnmeiss DD: Analysis of Adjacent Re-Operation Following Lumbar Total Disc Replacement. International Meeting on Advanced Spine Techniques. July, 2010; Toronto, Canada.
- 218. Duffy M, Saqqa SG, Blumenthal SL, Zigler JE, Guyer RD, Ohnmeiss DD: Treatment Options for Two-Level Symptomatic Disc Degeneration: Comparison of Total Disc Replacement, Fusion, and Hybrids. International Meeting on Advanced Spine Techniques. July, 2010; Toronto, Canada.
- 219. Blumenthal SL, Saqqa SG, Guyer RD, Zigler JE, Ohnmeiss, DD: Hybrid Combined Total Disc Replacement and Fusion Procedures in the Lumbar Spine: Clinical and Radiographic Outcome. International Meeting on Advanced Spine Techniques. July, 2010; Toronto, Canada.
- 220. Blumenthal SL, Ohnmeiss DD, Guyer RD, Zigler JE, Hume CS: Intra-Operative Conversion of Attempted Lumbar Total Disc Replacement to Fusion: Incidence and Causes. International Meeting on Advanced Spine Techniques. July, 2010; Toronto, Canada.
- 221. 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. International Meeting on Advanced Spine Techniques. July, 2010; Toronto, Canada.

- 222. Guyer RD, Shellock J, Kugler C, Hisey M, Bradley WD, Ohnmeiss DD: Indirect Decompression of Lumbar Spondylolisthesis using Anterior Lumbar Interbody Fusion and Minimally Invasive Pedicle Screw Fixation. International Meeting on Advanced Spine Techniques. July, 2010; Toronto, Canada.
- 223. Guyer RD, Pettine KA, Coric D, Nunley PD, Musante D: Radiographic Comparison of Two Lumbar Total Disc Replacement Devices: Results from a Prospective, Randomized, Controlled Multicenter FDA-Regulated Trial. International Meeting on Advanced Spine Techniques. July, 2010; Toronto, Canada.
- 224. Ohnmeiss DD, Zigler JE, Guyer RD, Blumenthal SL: Meta-Analysis of Cervical Total Disc Replacement Compared with Anterior Cervical Fusion: Data from Four Prospective Randomized Multicenter FDA IDE Trials. Cervical Spine Research Society. December, 2010; Charlotte, North Carolina.
- 225. Coric D, Guyer RD, Nunley PD, Gordon C, Dimmig T, Carmody C, Ohnmeiss DD, Boltes M: Prospective, Randomized, Multicenter Study of Cervical Arthroplasty: 269 Patients from the Kineflex/C Metal-on-Metal Artificial Disc IDE Study with Minimum Two-Year Follow-up. AANS/CNS Section on Disorders of the Spine and Peripheral Nerves. March, 2011; Phoenix, Arizona.
- 226. Zigler JE, Guyer RD, Ohnmeiss DD: Three-Level Total Disc Replacement. International Society for the Advancement of Spine Surgery. April, 2011; Las Vegas, Nevada.
- 227. Guyer RD, Blumenthal SL, Zigler JE, Verma-Kurvari S, Atanasov A, Ohnmeiss DD: Bone Mineral Density Scanning in Potential Lumbar Total Disc Replacement Patients. International Society for the Advancement of Spine Surgery. April, 2011; Las Vegas, Nevada.
- 228. 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. International Society for the Advancement of Spine Surgery. April, 2011; Las Vegas, Nevada.
- 229. Hyder Z, Ohnmeiss DD, Guyer RD, Blumenthal SL, Zigler JE: Meta-Analysis of Lumbar Total Disc Replacement FDA-Regulated Trials: A Missed Opportunity. International Society for the Advancement of Spine Surgery. April, 2011; Las Vegas, Nevada.
- 230. Guyer RD, Darwish A, Blumenthal SL, Zigler JE, Ohnmeiss DD: Lumbar Total Disc Replacement vs. Fusion: Analysis of Cost Comparison Studies. International Society for the Advancement of Spine Surgery April, 2011; Las Vegas, Nevada.
- 231. Blumenthal SL, Guyer RD, Zigler JE, Ohnmeiss DD, Verma-Kurvari S: Reported Re-Operations in Lumbar Total Disc Replacement: Analysis of the Literature. International Society for the Advancement of Spine Surgery. April, 2011; Las Vegas, Nevada.
- 232. Blumenthal S, Guyer R, Zigler J, Ohnmeiss D: Anterior Re-Operation at the Same Level Following Lumbar Total Disc Replacement. International Society for the Lumbar Spine. June, 2011; Gothenburg, Sweden.

- 233. Duffy M, Saqqa S, Zigler J, Guyer R, Ohnmeiss D, Blumenthal S: Treatment Options for Two-Level Symptomatic Disc Degeneration: Comparison of Total Disc Replacement, Fusion, and Hybrid. International Society for the Lumbar Spine. June, 2011; Gothenburg, Sweden.
- 234. Ohnmeiss D, Blumenthal S, Guyer R: Investigating the Potential Effect of "Euphoric Bias" for the New Technology on Results of Randomized Lumbar Total Disc Replacement Trials. International Society for the Lumbar Spine. June, 2011; Gothenburg, Sweden.
- 235. Guyer R, Darwish A, Blumenthal S, Ohnmeiss D, Zigler J: Lumbar Total Disc Replacement vs. Fusion: Analysis of Cost Comparison Studies. International Society for the Lumbar Spine. June, 2011; Gothenburg, Sweden.
- 236. Guyer RD, Thongtrangan I, Ohnmeiss DD, Zigler JE, Atanasov AM: Health-Related Quality of Life: How Does Symptomatic Disc Degeneration and Its Treatment with Total Disc Replacement Compare to Other Medical Conditions? International Meeting on Advanced Spine Techniques. July, 2011; Copenhagen, Denmark.
- 237. Guyer RD, Darwish A, Blumenthal SL, Zigler JE, Ohnmeiss DD: Lumbar Total Disc Replacement vs. Fusion: Analysis of Cost Comparison Studies. International Meeting on Advanced Spine Techniques. July, 2011; Copenhagen, Denmark.
- 238. Guyer RD, Blumenthal SL, Zigler JE, Ohnmeiss DD: Investigating the Potential Effect of "Euphoric Bias" for the New Technology on Results of Randomized Lumbar Total Disc Replacement Trials. International Meeting on Advanced Spine Techniques. July, 2011; Copenhagen, Denmark.
- 239. Hyder Z, Guyer RD, Ohnmeiss DD, Blumenthal SL, Zigler JE: Meta-Analysis of Lumbar Total Disc Replacement FDA-Regulated Trials: A Missed Opportunity. International Meeting on Advanced Spine Techniques. July, 2011; Copenhagen, Denmark.
- 240. Guyer RD, Samocha Y, Ohnmeiss DD, Blumenthal SL, Zigler JE: Cervical Total Disc Replacement vs. Anterior Cervical Fusion: Data from Four Prospective, Randomized, Multicenter Trials. International Meeting on Advanced Spine Techniques. July, 2011; Copenhagen, Denmark.
- 241. Guyer RD, Samocha Y, Ohnmeiss DD, Zigler JE, Blumenthal SL: Cervical Total Disc Replacement vs. Anterior Cervical Fusion: Data from Four Prospective, Randomized, Multicenter Trials. North American Spine Society. November, 2011; Chicago, Illinois.
- 242. Morrison T, Guyer RD, Hisey MS, Atanasov A, Ohnmeiss DD, Zigler JE, Blumenthal SL: Clinical Outcomes of Stand-Alone Anterior Lumbar Interbody Fusion. AO Spine Fellows' Forum. March, 2012; Banff, Alberta, Canada.
- 243. Ohnmeiss DD, Guyer RD, Blumenthal SL, Zigler JE: Impact of Cervical Symptoms on Ability to Participate in Recreational Activities. International Society for the Advancement of Spine Surgery. March, 2012; Barcelona, Spain.
- 244. Edwards K, Hisey MS, Bradley WD, Ohnmeiss DD, Zigler JE, Guyer RD: Extreme Lateral Interbody Fusion (XLIF): Clinical Results from One Center. International Society for the Advancement of Spine Surgery. March, 2012; Barcelona, Spain.

- 245. Ohnmeiss DD, Guyer RD, Blumenthal SL, Zigler JE: Analysis of Outcome Stability Following Surgery Involving a Cervical Spine Implant. International Society for the Advancement of Spine Surgery. March, 2012; Barcelona, Spain.
- 246. Morrison T, Guyer RD, Hisey MS, Atanasov A, Ohnmeiss DD, Zigler JE, Blumenthal SL: Clinical Outcomes of Stand-Alone Anterior Lumbar Interbody Fusion. AO Spine Fellows' Forum. March, 2012; Banff, Alberta, Canada.
- 247. Block AR, Ohnmeiss DD, Guyer RD, Atanasov A, Ben-Porath Y: Relationship between Pain, Patient Expectations, and Satisfaction Following Spine Surgery. SpineWeek International Society for the Study of the Lumbar Spine Section. May, 2012; Amsterdam, The Netherlands.
- 248. Lieberman IH, Sparks J, Ohnmeiss DD, Verma-Kurvari S, Guyer RD, Zigler JE: Comparison of Manual and OfficePACS-Based Digital Methods for Cobb Angle Measurements in Patients with Spinal Deformity. SpineWeek International Society for the Study of the Lumbar Spine Section. May, 2012; Amsterdam, The Netherlands.
- 249. Ohnmeiss DD, Thongthangen I, Guyer RD, Zigler JE, Atanasov AM: Evaluating Symptomatic Lumbar Disc Degeneration and Its Treatment in the Context of Other Medical Conditions. SpineWeek International Society for the Study of the Lumbar Spine Section. May, 2012; Amsterdam, The Netherlands.
- 250. Block AR, Ohnmeiss DD, Guyer RD, Atanasov A, Ughwanogho E, Ben-Porath Y: Workers Compensation Versus Non Workers Compensation: Personality Differences. SpineWeek International Society for the Study of the Lumbar Spine Section. May, 2012; Amsterdam, The Netherlands.
- 251. Morrison T, Guyer RD, Hisey MS, Atanasov A, Ohnmeiss DD, Blumenthal SL, Zigler JE: Clinical Outcomes of Stand-Alone Anterior Lumbar Interbody Fusion. SpineWeek International Society for the Study of the Lumbar Spine Section. May, 2012; Amsterdam, The Netherlands.
- 252. Guyer RD, Blumenthal SL, Zigler JE, Ohnmeiss DD, Verma-Kurvari S: Re-operations in Lumbar Total Disc Replacement: Analysis of the Literature. SpineWeek North American Spine Society Section. May, 2012; Amsterdam, The Netherlands.
- 253. Guyer RD, Ohnmeiss DD, Blumenthal SL, Zigler JE: Comparison of Re-Operations in Cervical Total Disc Replacement Versus Anterior Cervical Fusion. SpineWeek North American Spine Society Section. May, 2012; Amsterdam, The Netherlands.
- 254. Ohnmeiss DD, Guyer RD, Blumenthal SL, Zigler JE: Impact of Cervical Symptoms on Ability to Participate in Recreational Activities. SpineWeek North American Spine Society Section. May, 2012; Amsterdam, The Netherlands.
- 255. Ohnmeiss DD, Guyer RD, Blumenthal SL, Zigler JE: Analysis of Outcome Stability Following Surgery Involving Cervical Spine Implant. SpineWeek North American Spine Society Section. May, 2012; Amsterdam, The Netherlands.
- 256. Hisey MS, Edwards K, Ohnmeiss DD, Verma-Kurvari S, Guyer RD, Zigler JE: Extreme Lateral Interbody Fusion (XLIF): Clinical Results. SpineWeek North American Spine Society Section. May, 2012; Amsterdam, The Netherlands.

- 257. Lieberman IH, Sparks J, Hu X, Ohnmeiss DD, Verma-Kurvari S, Guyer RD, Zigler JE: Comparison of Manual and OfficePACS-Based Digital Methods for Cobb Angle Measurements in Patients with Spinal Deformity. International Meeting on Advanced Spine Technologies. July, 2012; Istanbul, Turkey.
- 258. Block AR, Ben-Porath Y, Ohnmeiss DD, Guyer RD, Marek R: Psychosocial Factors and Expectancy Contribute Separately to Spine Surgery Outcome. North American Spine Society. October, 2012; Dallas, Texas.
- 259. Blumenthal SL, Ohnmeiss DD, Guyer RD, Zigler JE: Impact of Cervical Symptoms on Ability to Participate in Recreational Activities. Cervical Spine Research Society. December, 2012; Chicago, Illinois.
- 260. Lieberman IH, Sparks J, Ohnmeiss DD, Verma-Kurvari S, Guyer RD, Zigler JE: Cobb Angle Measurements in Patients with Spinal Deformity: OFFICEPACS-based Digital Method Compared with Traditional Manual Measurements. International Society for the Advancement of Spine Surgery. April, 2013; Vancouver, Canada.
- 261. Guyer RD, Shivers J, Ohnmeiss DD, Zigler JE: Implementation and Impact of Preoperative Peer Case Review in a Spine Practice. International Society for the Study of the Lumbar Spine. May, 2013; Scottsdale, Arizona.
- 262. 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 Society of Australia. April, 2014; Brisbane, Australia.
- 263. Owusu A, Zigler JE, Ohnmeiss DD, Guyer RD: Pregnancy after Lumbar Total Disc Replacement. International Society for the Advancement of Spine Surgery. Spine Society of Australia. April, 2014; Brisbane, Australia.
- 264. 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. International Society for the Advancement of Spine Surgery. April-May, 2014; Miami, Florida.
- 265. Owusu A, Zigler JE, Ohnmeiss DD, Guyer RD: Pregnancy after Lumbar Total Disc Replacement. International Society for the Study of the Lumbar Spine. June, 2014; Seoul, Korea.
- 266. Biehn J, Shellock J, Ohnmeiss DD, Guyer RD, Zigler JE: Use of Amniotic Membrane Anti-adhesion Barrier for Lumbar Discectomy. International Society for the Study of the Lumbar Spine. June, 2014; Seoul, Korea.
- 267. Guyer RD, Baker R, Blumenthal SL, Zigler JE, Shivers J, Ohnmeiss DD, Verma-Kurvari S: Implementation of a Spine Surgery Quality Assurance Program in a Multi-Site Private Practice. International Society for the Study of the Lumbar Spine. June, 2014; Seoul, Korea.
- 268. Block A, Ohnmeiss DD, Guyer RD: A Brief Inventory to Assess Psychosocial Risk for Reduced Outcome of Spine Surgery. North American Spine Society. November, 2014; San Francisco, California.

- 269. Biehn J, Shellock J, Ohnmeiss DD, Guyer RD, Zigler JE: Use of Amniotic Membrane Anti-adhesion Barrier for Lumbar Discectomy. North American Spine Society. November, 2014; San Francisco, California.
- 270. Guyer RD, Rogers RW, Blumenthal SL, Ohnmeiss DD, Zigler JE: Clinical Outcomes Following Anterior Cervical Hybrid Surgery Using Total Disc Replacement Combined with Anterior Cervical Fusion at the Adjacent Segment. Spine Society of Australia. April, 2015; Canberra, Australia.
- 271. Ohnmeiss DD, Guyer RD, Zigler JE: Stability of Measures Assessing Clinical Outcome Following Anterior Cervical Spine Surgery. International Society for the Advancement of Spine Surgery. April, 2015; San Diego, California.
- 272. Happ C, Guyer RD, Ohnmeiss DD, Zigler JE: Stand-alone Interbody Devices in the Treatment of Cervical Spine Disease. International Society for the Advancement of Spine Surgery. April, 2015; San Diego, California.
- 273. Owusu A, Zigler JE, Ohnmeiss DD, Guyer RD: Pregnancy after Lumbar Total Disc Replacement. International Society for the Advancement of Spine Surgery. April, 2015; San Diego, California.
- 274. Otero-Lopez E, Guyer RD, Ohnmeiss DD, Zigler JE: Comparison of Clinical Outcomes for Anterior vs. 360 Fusion at the Fusion Level of Lumbar Hybrid Surgery. International Society for the Advancement of Spine Surgery. April, 2015; San Diego, California.
- 275. Happ C, Guyer RD, Ohnmeiss DD, Zigler JE: Stand-alone Interbody Devices in the Treatment of Cervical Spine Disease. Global Spine Congress. May, 2015; Buenos Aires, Argentina.
- 276. Hipp J, Guyer RD, Ohnmeiss DD, Zigler JE: Developing Normative Values for a Quantifiable, Clinically Applicable Method to Evaluate Lumbar Instability. International Society for the Study of the Lumbar Spine. June, 2015; San Francisco, California.
- 277. Hipp J, Guyer RD, Ohnmeiss DD, Zigler JE: A New Method Correlating an Objective Radiographic Metric for Lumbar Spine Stability and the Fluid Sign on MRI. International Society for the Study of the Lumbar Spine. June, 2015; San Francisco, California.
- 278. Guyer RD, Shivers J, Ohnmeiss DD, Zigler JE, Blumenthal SL: Results of a Complex Case Peer Review Program in a Private Practice Spine Specialty Clinic. International Society for the Study of the Lumbar Spine. June, 2015; San Francisco, California.
- 279. Otero-Lopez ER, Blumenthal SL, Guyer RD, Zigler JE, Ohnmeiss DD: Comparison of Clinical Outcomes for Anterior vs. 360 Fusion at the Fusion Level of Lumbar Hybrid (Total Disc Replacement / Fusion) Surgery. International Society for the Study of the Lumbar Spine. June, 2015; San Francisco, California.
- 280. Happ CM, Guyer RD, Blumenthal SL, Zigler JE, Ohnmeiss DD: Outcome after Anterior Cervical Fusion Using a Cervical Stand-alone Fusion Cage. Spine Across the Sea. July, 2015; Big Island, Kohala Coast, Hawaii.
- 281. Ohnmeiss DD, Zigler JE, Guyer RD, Blumenthal SL: Pregnancy after Lumbar Total Disc Replacement. North American Spine Society. October, 2015; Chicago, Illinois.

- 282. Ohnmeiss DD, Guyer RD, Zigler JE, Blumenthal SL: Stability of Clinical Outcome Measures Following Anterior Cervical Spine Surgery. Cervical Spine Research Society. December, 2015; San Diego, California.
- 283. 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. Cervical Spine Research Society. December, 2015; San Diego, California.
- 284. Guyer R, Abitbol J, Ohnmeiss D, 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. International Society for the Advancement of Spine Surgery. April, 2016; Las Vegas, Nevada.
- 285. Guyer RD, Putney E, Ohnmeiss DD, Zigler JE, Blumenthal SL: Analysis of Hospital Length of Stay Following Lumbar Anterior/Posterior Combined Fusion: Is There a Disadvantage Associated with Shorter Stays? International Society for the Study of the Lumbar Spine SpineWeek. May, 2016; Singapore.
- 286. Zigler JE, Shivers J, Guyer RD, Ohnmeiss DD: 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 SpineWeek. May, 2016; Singapore.
- 287. Ohnmeiss DD, Guyer RD, Blumenthal SL, Zigler JE: Re-operation after Lumbar Spine Surgery: Significant Variation in Rates Due to the Definitions Applied for Re-operation. North American Spine Society Summer Meeting. July, 2016; Miami, Florida.
- 288. Blumenthal SL, Otero-Lopez E, Guyer RD, Zigler JE, Ohnmeiss DD: Lumbar Hybrid Surgery with Total Disc Replacement at One Level and Fusion at the Adjacent Level: Does Fusion Type Impact Outcome? North American Spine Society. October, 2016; Boston, Massachusetts.
- 289. Sasso R, Smucker J, Blumenthal S, Guyer R, Zigler J: Early Experience with the M6-C Artificial Cervical Disc: A Report from Two IDE Investigational Centers Involved in a US FDA Approved IDE Study. International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
- 290. Guyer R, Zigler J, Ohnmeiss D: 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 Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
- 291. Zigler J, Guyer R: Maintenance of Competence to Practice Spine Surgery: Do We Know How Many Cases Are Required? International Society for the Advancement of Spine Surgery. April, 2017; Boca Raton, Florida.
- 292. Zigler JE, Ohnmeiss DD: 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 Study of the Lumbar Spine. May-June, 2017; Athens, Greece.

- 293. Guyer RD, Zigler JE, Blumenthal SL, Ohnmeiss DD: Clinical Outcome after Three-level Lumbar Total Disc Replacement. International Society for the Advancement of Spine Surgery. April, 2018; Toronto, Canada.
- 294. Blumenthal SL, Ohnmeiss DD, Guyer RD, Zigler JE: Analysis of Lumbar Total Disc Replacement Removals and Revisions: A 17-year Experience. International Society for the Study of the Lumbar Spine. May, 2018; Banff, Canada.
- 295. Guyer RD, Ohnmeiss DD: Supine vs. Upright Weight Bearing MRI in the Evaluation of Patients with Lumbar Spondylolisthesis. International Society for the Study of the Lumbar Spine. May, 2018; Banff, Canada.
- 296. Guyer RD, Ohnmeiss DD: Supine vs. Upright Weight Bearing MRI in the Evaluation of Patients with Lumbar Spondylolisthesis. Spine Across the Sea. July-August, 2018; Kauai, Hawaii.
- 297. Haddas R, Guyer RD, Blumenthal SL, Perez Y, Musngi N, Ritz S: The Effect of Physical Therapy on Gait and Balance in Patients follow Lumbar Artificial Disc Replacement A Preliminary Study. North American Spine Society. September, 2018; Los Angeles, California.
- 298. Blumenthal SL, Zigler JE, Guyer RD, Ohnmeiss DD: Intra-operative Conversion of Cervical Total Disc Replacement to Fusion: Incidence and Reasons. Spine Society of Australia. April, 2019; Queensland, Australia.
- 299. Blumenthal SL, Ohnmeiss DD, Guyer RD, Zigler JE: Bone Mineral Density Screening in Patients Who Are Lumbar Total Disc Replacement Patients. International Society for the Study of the Lumbar Spine. May, 2019; Kyoto, Japan.
- 300. Guyer RD, Blumenthal SL, Zigler JE, Ohnmeiss DD: Impact of Range of Motion on Progression of Adjacent Segment Disease: Disc vs. Disc. International Society for the Study of the Lumbar Spine. May, 2019; Kyoto, Japan.
- 301. 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? International Society for the Study of the Lumbar Spine. May, 2019; Kyoto, Japan.
- 302. Blumenthal SL, Zigler JE, Guyer RD: Spike vs. Keel: Does Endplate Design of Lumbar Artificial Discs Affect Radiographic Outcomes? International Society for the Study of the Lumbar Spine. May, 2019; Kyoto, Japan.
- 303. Zigler JE, Guyer RD, Blumenthal SL, Ohnmeiss DD: Spike vs. Keel: Does Endplate Design of Lumbar Artificial Discs Affect Radiographic Outcomes? North American Spine Society. September, 2019; Chicago, Illinois.
- 304. Blumenthal SL, Ohnmeiss DD, Guyer RD, Zigler JE, Satin A: In Which Cases Do Surgeons Specializing in Total Disc Replacement Perform Fusion in Patients with Symptomatic Lumbar Disc Degeneration? North American Spine Society. October, 2020 (virtual meeting).
- 305. Peloza J, Millgram MA, Rand N, Guyer RD, LeHuec JC, Ashkenazi E: Improved Efficacy of Transforaminal Lumbar Interbody Fusion Procedures Due to a New Device: Preliminary

- Cadaver Study and a 208-patient Retrospective Study in a Single Center. International Society for the Advancement of Spine Surgery. May, 2021; Miami, Florida.
- 306. Guyer RD, Ohnmeiss DD, Blumenthal SL, Zigler JE: Clinical Outcome of Anterior Lumbar Interbody Fusion Using a Stand-alone Cage for the Treatment of Symptomatic Disc Degeneration. International Society for the Study of the Lumbar Spine. June, 2021 (virtual meeting).
- 307. Blumenthal SL, Kiridly D, Shellock SL, Guyer RD, Zigler JE, Ohnmeiss DD: Late Failure of Cervical Disc Arthroplasty Due to Osteolysis. Spine Across the Sea (Joint meeting of NASS and JOA). July 2021; Kohala Coast, Hawaii.
- 308. Beall D, Gershon S, Wilson G, Guyer R: Viable Allograft Supplemented Disc Regeneration in the Treatment of Patients With Low Back Pain (VAST Trial): Interim Results of an Open-label Extension Study. International Society for the Study of the Lumbar Spine. May, 2022; Boston, Massachusetts.
- 309. Guyer RD, Shellock JL, Blumenthal SL, Zigler JE, Ohnmeiss DD: What Happened to Patients Who Received the Charite Lumbar Artificial Disc? North American Spine Society. October, 2022; Chicago, Illinois.
- 310. Malone H, Guyer R, Millgram M, Ashkenazi E: A New High-Speed Shielded Curved Drill for Osteophyte Removal in Cervical Corpectomy and Fusion Procedures: A Retrospective Case Series. Cervical Spine Research Society. November, 2022; San Diego, California.
- 311. Shellock JL, Zigler JE, Guyer RD, Blumenthal SL, Ohnmeiss DD: Outcome of 2-level Lumbar Total Disc Replacement: Results of a Long-term Follow-up Study. SpineWeek (International Society for the Study of the Lumbar Spine section). May, 2023; Melbourne, Australia.
- 312. Blumenthal SL, Guyer RD, Shellock JL, Zigler JE, Ohnmeiss DD: Lumbar Total Disc Replacement for the Treatment of Adjacent Segment Degeneration after Lumbar Fusion. SpineWeek (International Society for the Study of the Lumbar Spine section). May, 2023; Melbourne, Australia.
- 313. Blumenthal SL, Guyer RD Courtois EC, Edionwe J, Ohnmeiss DD: Is the Use of Intraoperative Neuromonitoring Justified during Lumbar Anterior Approach Surgery? SpineWeek (International Society for the Study of the Lumbar Spine section). May, 2023; Melbourne, Australia.
- 314. Blumenthal SL, Courtois EC, Griffin C, Guyer RD, Zigler JE, Shellock JL, Ohnmeiss DD: Incidence of Implant Removal or Revision Surgery after Cervical Total Disc Replacement in a Consecutive Series of 1,615 Patients Beginning with the First Case Experience in 2003. North American Spine Society. October, 2023; Los Angeles, California.
- 315. Nunley PD, Guyer RD, Strenge KB, Bae H, Patel A, Khachatryan A, Park A, Yue J, Khalil J, Stone M: Forty-eight-month Clinical Outcomes of a Prospective, Controlled, Multicenter Study Evaluating Two-level Cervical Disc Arthroplasty with a PEEK-onceramic Artificial Disc. Cervical Spine Research Society. November-December, 2023; Las Vegas, Nevada.

- 316. Blumenthal SL, Guyer RD, Courtois EC, Shellock JL, Zigler JE, Ohnmeiss DD: Changes in Sagittal Alignment Following Lumbar Total Disc Replacement: Analysis Based on Full-Body EOS Imaging. International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
- 317. Blumenthal SL, Ohnmeiss DD, Courtois EC, Guyer RD, Shellock JL, Zigler JE: Strategies for Addressing a Series of Failed Cervical Total Disc Replacements. International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
- 318. Ohnmeiss DD, Courtois EC, Guyer RD: Assessing Bone Quality in Hounsfield Units Using Computed Tomography: What Value Should Be Used to Classify Bone as Normal or Osteoporotic? International Society for the Advancement of Spine Surgery. April, 2024; Miami, Florida.
- 319. Ahn J, Courtois C, Ohnmeiss DD, Guyer RD: Impact of Age on the Occurrence of Vascular Complications in Patients Undergoing Anterior Lumbar Approach Surgery. (Oral Poster) International Society for the Study of the Lumbar Spine. May, 2024; Milan, Italy.
- 320. Blumenthal SL, Guyer RD, Courtois EC, Shellock JL, Zigler JE, Ohnmeiss DD: Effect of Lumbar Total Disc Replacement on Sagittal Alignment. International Society for the Study of the Lumbar Spine. May, 2024, Milan, Italy.
- 321. Ohnmeiss DD, Guyer RD, Blumenthal SL, Courtois EC, Shellock JL, Zigler JE: Relationship of Discography to Re-Operation for Disc-Related Pain More Than 10 Years after Lumbar Total Disc Replacement. International Society for the Study of the Lumbar Spine. May, 2024, Milan, Italy.
- 322. Ahn J, Courtois EC, Guyer RD, Blumenthal SL, Ohnmeiss DD: Impact of Age on the Occurrence of Vascular Complications in Patients Undergoing Anterior Lumbar Approach Surgery. Spine Across the Sea. July, 2024; Kauai, Hawaii.
- 323. Guyer RD, Blumenthal SL, Zigler JE, Shellock SJ, Ohnmeiss DD: Clinical Outcome of Lumbar Total Disc Replacement in Patients More Than 60 Years of Age. Spine Across the Sea. July, 2024; Kauai, Hawaii.
- 324. Liu S, Ohnmeiss D, Samartzis D, Hall DJ, Guyer R, Satin A, Blumenthal S, Pourzal R: Hyperspectral Chemical Imaging Reveals Spatially Varied Degradation of Artificial Nucleus From M6-C Cervical Disc. International Society for Technology in Arthroplasty. August, 2024; Nashville, Tennessee.
- 325. Satin AM, Derman PB, Guyer RD, Patwardhan AG, Rogers-LaVanne MP: Change In Range of Motion after Cervical Disc Arthroplasty and the Association with Patient-Reported Outcomes at 2-Years. Society for Minimally Invasive Spine Surgery. September, 2024; Las Vegas, Nevada.
- 326. Guyer RD, Nunley PD, Sasso R, Patel A, Park A, Bae H, Ohnmeiss DD: Evaluation of Radiographically Relevant Heterotopic Ossification Following One-Level Cervical Disc Arthroplasty with a PEEK-on-Ceramic Artificial Disc (Oral Poster). North American Spine Society. September, 2024; Chicago, Illinois.
- 327. Blumenthal SL, Ohnmeiss DD, Courtois EC, Guyer RD, Shellock JL, Zigler JE: Strategies for Addressing a Series of Failed Cervical Total Disc Replacements. North American Spine Society. September, 2024; Chicago, Illinois.

- 328. Guyer R, Zigler J, Blumenthal S, Shellock J, Ohnmeiss D: Clinical Outcome of Lumbar Total Disc Replacement In Patients More Than 60 Years of Age. Spine Summit. February, 2025; Tampa, Florida.
- 329. Guyer R, Fisher K, Zigler J, Blumenthal S, Shellock J, Ohnmeiss D: Intraoperative Conversion of Primary Cervical Total Disc Replacement to Fusion: Incidence and Reasons. Spine Summit. February, 2025; Tampa, Florida.
- 330. Guyer R, Blumenthal S, Shellock J, Wilson B, Zigler J, Ohnmeiss D: Outcomes of Lumbar Total Disc Replacement in Patients with Multiple Previous Discectomies. Spine Society of Australia. April, 2025; Perth, Australia.
- 331. Guyer R, Blumenthal S, Platt K, Zigler J, Shellock J, Ohnmeiss D: Adoption of Total Disc Replacement Among Surgeons Who Received Training on Their Use During Spine Surgery Fellowship. Spine Society of Australia. April, 2025; Perth, Australia.
- 332. Ohnmeiss DD, Courtois EC, Guyer RD, Blumenthal SL, Shellock JS, Zigler JE: Neck Disability Index Scores Across Multiple Cervical Total Disc Replacement Devices and during Long-term Follow-up of Patients Enrolled in Food and Drug Administration Investigational Device Exemption Trials. International Society for the Advancement of Spine Surgery. April, 2025; Miami, Florida.
- 333. Guyer RD, Blumenthal SL, Courtois EC, Zigler JE, Shellock JL, Ohnmeiss DD: Incidence of New Onset Leg Pain Following Anterior Approach Lumbar Surgery. International Society for the Advancement of Spine Surgery. April, 2025; Miami, Florida.
- 334. Shellock JL, Zigler JE, Platt K, Guyer RD, Blumenthal SL, Ohnmeiss DD: Adoption of Total Disc Replacement Among Surgeons Who Received Training on Their Use During Spine Surgery Fellowship. International Society for the Advancement of Spine Surgery. April, 2025; Miami, Florida.
- 335. Guyer R, Shellock J, Wanderman N, Spina N: Comparison of Modular and One-Piece ALIF Implants: Radiographic Analysis of Subsidence and Segmental Lordosis Outcomes. International Society for the Advancement of Spine Surgery. April, 2025; Miami, Florida.
- 336. Guyer R, Blumenthal S, Wilson B, Zigler J, Shellock J, Ohnmeiss D: Outcomes of Lumbar Total Disc Replacement in Patients with Multiple Previous Discectomies. International Society for the Study of the Lumbar Spine. May, 2025; Atlanta, Georgia.
- 337. Guyer R, Blumenthal S, Zigler J, Shellock J, Ohnmeiss D:Clinical Outcome of Lumbar Total Disc Replacement in Patients More Than 60 Years of Age. International Society for the Study of the Lumbar Spine. May, 2025; Atlanta, Georgia.