

BIOGRAPHICAL SKETCH

Kai-Uwe Lewandrowski, MD



NAME	POSITION TITLE
Kai-Uwe Lewandrowski	Staff Surgeon, Owner, Center for Advanced Spine Care of Southern Arizona

EDUCATION/TRAINING/POSITIONS

	DEGREE	YEAR(s)	FIELD OF STUDY
Humboldt-Univ. Medical School, Berlin, Germany	M.D.	11/1987-8/92	Medicine
Research Fellow, MGH, Boston MA		9/1992-12/94	Orthopaedic Surgery
Surgical Resident, Ruhr-Univ., Bergmannsheil, Germany		1/1995-6/96	Trauma Surgery
Surgical Resident, Boston University, Boston MA		7/1996-7/97	General Surgery
Research Fellow		8/1997-8/99	Orthopaedic Surgery
Resident in Orthopaedic Surgery, Harvard Combined Orthopaedic Program		9/1999-8/03	Orthopaedic Surgery
Fellow in Spinal Surgery, Cleveland Clinic Foundation		8/2003-8/04	Spinal Surgery
Staff Surgeon, Spine Center, Tucson Orthopaedic Institute, Tucson, Arizona		9/2004-9/05	Orthopaedic Spine Surgery
Staff Surgeon Southwest Orthopaedics, PLLC		9/2005 – 9/2006	Orthopaedic Spine Surgery
Staff Surgeon St. Mary's Hospital, Tucson Arizona		6/2006 – present	Orthopaedic Spine Surgery
Staff Surgeon, Owner, Center for Advanced Spine Care		9/2006 - present	Orthopaedic Spine Surgery
Clinical Assistant Professor in Orthopaedic Surgery, University of Arizona		6/2006-6/2009	Orthopaedic Spine Surgery
Surgical Institute of Tucson, Chair Medical Executive Committee		4/2014-10/2021	Orthopaedic Spine Surgery
Division Chair Orthopaedic Surgery, St. Mary's Hospital, Tucson Arizona		3/2015-3/2019	Orthopaedic Spine Surgery
Chair Division of Division of Personalized Pain Therapy Research & Education, Center For Advanced Spine Care of Southern Arizona		2021 - present	Orthopaedic Spine Surgery
Research Professor of Orthopaedic Surgery University of Arizona, Banner University Medical Center Tucson		2024 - present	Orthopaedic Research

PROFESSIONAL EXPERIENCE

6/1992	Dissertation: "Concomitant meniscus and articular cartilage lesions in the femoro-tibial joint" (german), Humboldt University, Charité Medical School, 1992
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9/1992 - 12/1994	Research Fellow, Orthopaedic Surgery, Massachusetts General Hospital, Boston , MA („Kinetics of Demineralization of Human Cortical Bone“; Orthotopic Allograft Rat Diaphyseal Transplantation“; „Immune Response to large frozen bone allografts in humans“; „Electron Microscopic Studies on the Process of Cortical Bone Demineralization“)
1/1993 - 12/1994	Associate Research Fellow, Wellman Laboratories of Photomedicine, Massachusetts General Hospital, Boston , MA („ Osteoinduction in Cortical Bone Allografts by Er:YAG Laser-Holes“; „Improved Plating in Maxillofacial Surgery by Use of an Er:YAG Laser“)
3-4/1993	Visiting Research Fellow, Bone & Joint Research Laboratory, Ottawa General Hospital, University of Ottawa („Flexural Rigidity of Partially Demineralized Diaphyseal Bone Grafts“)
6/1994	Visiting Research Fellow, Abteilung für Biomechanik, University of Ulm, Germany („Mechanical Test Methods for Long Bones“)
10/1994	Visiting Research Fellow, Orthopaedic Research Laboratory, Case-Western University, Cleveland, OH („Allograft Bone Transplantation in a Canine Animal Model“)
3/1995 - 6/1996	Surgical Intern, Ruhr-University, Bergmannsheil Trauma Center, Bochum, Germany („Acceleration of Bone Allograft Incorporation. A Histological, Biomechanical, and Immunological Study in Sheep“)
4/1995 - 5/1996	Collaboration with AO Research Institute, ARI, Davos, Switzerland („Techniques of International Fixation for Transplantation of Long Bones in Sheep“)
5/1995 - 3/1997	Collaboration with Immunology Dep. University of Essen, Germany, („Tissue Typing and Crossmatching of Recipients of Bone Allografts. An Experimental Study in Sheep“)
6/1995 - 4/1996	Collaboration with Biophysics Institute, University of Münster, Germany („Er:YAG Laser Drilling of Cortical Bone Allograft“)
8/1996 - 4/97	Orthopaedic Research Fellow, Orthopaedic Surgery, MGH, Harvard Medical School („Stimulators of Bone Resorption in Cortical Bone Allografts“)
6/1997	Resident, Department of Surgery, Boston Medical Center, Boston, MA
7/1998 – 6/1999	Research Fellow, Orthopaedic Surgery, Massachusetts General Hospital, Boston , MA Clinical study on the use of perforated and demineralized cortical bone allografts
6/1999 –07//2003	Resident, Orthopaedic Surgery, Massachusetts General Hospital, Boston , MA Harvard Combined Orthopaedic Residency Program
08/01/2003 –07/31/2004	Fellow in Spinal Surgery at Cleveland Clinic Foundation, Combined Neurosurgical/ Orthopaedic Fellowship
08/01/2005 – 01/30/2006	Staff surgeon, Tucson Orthopaedic Institute, Tucson, Arizona
01/31/2006 –	Staff surgeon, Center for Advanced Spinal Surgery, Tucson, Arizona
01/31/2006 –	Clinical Assistant Professor in Orthopaedic Surgery, University of Arizona, Tucson, Arizona
07/16/2016	Inducted Corresponding Foreign Member of the Brazilian Military Medical Academy
04/01/2017	Founding and construction of a self-financed stand-alone 10,000 square feet ambulatory surgery center – The Surgical Institute of Tucson – with two class C operating rooms and state-of-the-art image-guided outpatient spine care program with emphasis on endoscopy and other MIS techniques. Successfully Medicare and AAASF certified in 2018. Successfully managed and built as a vertically integrated ASC multispecialty platform for six orthopaedic, spine, and pain specialists. Successfully sold to Banner Health in May 2021 with set up of collaborative private and academic futures emphasizing outpatient spine care in the Southern Arizona healthcare market.
05/18/2017	Appointed Visiting Professor, Department of Neurosurgery, UniRio, Universidade do Estado Rio de Janeiro, Brazil
2/12/2019	Appointed Visiting Professor, Department of Orthopaedic Surgery, Universidad Colsanitas, Bogota, Colombia
11/03/2020	Appointed Associate Professor, Department of Orthopaedic Surgery, Universidad Colsanitas, Bogota, Colombia
08/12/2020	Awarded doctor honoris causa (Dr. h.c.) Department of Orthopaedic Surgery, UniRio, Universidade do Estado Rio de Janeiro, Brazil

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09/2023	Elected President SICCM I - Sociedad Interamericana de Cirugía de Columna Mínimamente Invasiva - Inter-American Society of Minimally Invasive Spine Surgery
09/2025	President Elect ISESS – International Society for Endoscopic Spinal Surgery

EDITORIAL BOARD MEMBERSHIPS

09/01/2020	Appointed Editorial Board Member SpineLine
11/2019	Deputy Editor for International Journal of Spine Surgery
06/18/2020	Academic Editor BioMed Research International
05/10/2021	Appointed Editor Spine Section Archives in Neurosurgery
10/2020	Associate Editor for International Journal of Spine Surgery
11/2020	Editor-in-Chief Journal of Spine
03/2023	Associate Editor Columna
04/2023	Editor-in-Chief Current Surgical Endoscopy
06/2023	Editor-in-Chief Current Aging Science
03/2024	Appointed Editorial Board Member Journal Substance Abuse and Rehabilitation
03/2024	Appointed Editorial Board Member Gene & Protein in Disease
03/2024	Appointed Editorial Board Member Journal of Personalized Medicine
09/2025	Appointed Associate Editor for the Journal of Neuroscience & Clinical Practices

NATIONAL ACADEMY MEMBERSHIP

6/2016	Elected Corresponding Member Brazilian Military Medical Academy
02/2022	Elected Foreign Corresponding Member Colombian National Academy of Medicine
12/2023	Elected Foreign Corresponding Member Brazilian National Academy of Medicine

BOARD STATUS:

The American Board of Orthopaedic Surgery, 2009, recertified 2018
The American Board of Spinal Surgery, 2009

LICENSURE:

State of Arizona (active)
State of New Mexico (active)
Licensed to Practice Medicine in Germany (Approbation als Arzt - active)

MEMBERSHIP & LEADERSHIP POSITIONS:

American Academy of Orthopaedic Surgeons (AAOS)
Orthopaedic Research Society (ORS)
North American Spine Society (NASS)
International Society for the Advancement of Spine Surgery (ISASS)
Past-President Sociedad Interamericana de Cirugía de Columna Mínimamente Invasiva (SICCM I)
President-Elect International Society for Endoscopic Spinal Surgery (ISESS)
International Intradiscal Therapy Society (IITS)
President World Congress Minimally Invasive Spine Surgery and Techniques (WCMISST-2026)

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Full Professor, Department of Orthopaedic Surgery, Universidad Colsanitas, Bogota, Colombia
Visiting Professor, Department of Orthopaedic Surgery, UniRio, Universidade do Estado Rio de Janeiro, Brazil

RECITATION IMPACT SCORES (Last Updated 02 03 2026):

- [Scopus Author ID: 7004477556](#); H-index 31 based on 242 articles with 3,724 Citations by 2,763 documents
- H-index = 41 based on a total of 398 documents and 6,719 citations (Google Scholar), = 27 since 2021 based 239 documents and 2778 citations
- i10-index = 137, since 2021 = 90 (Google Scholar)

AWARDS:

1. Young Investigators Award of the European Society for Surgical Research. Osteoinduction in cortical bone grafts by controlled demineralization and laser-perforation. Lewandrowski KU, Tomford WW, Mankin HJ, Schollmeier G, Ekkernkamp A, Muhr G. Southampton, UK, March 31 - April 3, 1996.
2. Osteotech/OREF Award for Excellence in Bone Allograft Research. Modification of Cortical Bone Allografts by Partial Demineralization and Laser-Perforation to Enhance Incorporation. A Histologic, Biomechanical, and Immunological Study. Lewandrowski, KU, Schollmeier, G, Ekkernkamp A, Uhthoff HK, Mankin HJ, Tomford WW. AAOS Anaheim, 1999.
3. Titulo de Membro Correspondente Internacional da Academia Brasileira de Medicina Militar, pela distinção e pelos bons serviços prestados.
4. 75th Anniversary Service Medal of the Brazilian Military Medical Academy, pela distinção e pelos bons serviços prestados.
5. Orden al merito SILACO en el grado de Caballero - Order of merit "Knight" of SILACO (Sociedad Ibero-latinoamericana de Columna), Santiago de Chile, November 9, 2017.
6. doctor honoris causa (Dr. h.c.) Department of Neurosurgery, UniRio, Universidade do Estado Rio de Janeiro, Brazil
7. Foreign Corresponding Member of the National Academy of Medicine of Colombia (Academia de Medicina de Colombia). Approved during administrative session of the academy on July 28, 2022 in Bogota, Colombia.
8. Foreign Corresponding Member of the National Academy of Medicine of Brazil (Academia de Medicina do Brazil). Approved during administrative session of the academy on December 4, 2023 in Rio de Janeiro, Brazil.

HONORS/GRANTS:

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|-----------------|--|
| 9/1992 - 4/1993 | Fellowship, Rotary Foundation |
| 7/1993 - 1/1994 | Fellowship MGH Laser Center, Grant from the Department of Energy (DE-FG02-91ER61228) |
| 4/1995 | Young Investigators Award of the European Surgical Research Society |
| 3/1995 - 4/1995 | Small grant „Mechanical Evaluation of Healing in Cortical Bone Allografts“, from the German-Canadian Science & Technology Foundation, Ministry of Foreign Affairs & International Trade, |

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PI Lewandrowski
 4/1996 Grant "Allogeneic Bone Transplantation" from the Hauptverband der gewerblichen Berufsgenossenschaften (German Foundation), PI Lewandrowski
 6/1997 Milheim Foundation: - „Limb Salvage in the Treatment of Bone Tumors“, PI Lewandrowski,
 9/1997 - NIH/NIAMS Grant AR45062 „Improvement of Incorporation of Bone Allografts“, PI Lewandrowski,

LANGUAGES: English, German, Spanish, Portuguese, Italian, Russian, Polish
INTERESTS: Technology, Engineering, Design, Construction, Music, Piano, Foreign Languages, Travel, Cooking, Sailing, Writing, Bee Keeping

FULL PAPERS:

1. **Arthroscopic treatment of knee injuries.** Schollmeier G, Lewandrowski KU, Mueller J. Heilberufe 45, No 5, 222-25, 1993.
2. **Immune response in recipients of large frozen bone allografts and their effect on clinical results.** Tomford WW, Springfield D, Lewandrowski KU, Chung HW, Mankin HJ, Fuller TC, Transactions of the Orthop Res Society, 40, 122, 1994.
3. **Regional cerebral function determined by FDG-PET in healthy volunteers: Normal patterns and changes with age.** Loessner A, Alavi A, Lewandrowski KU, Souder E, Gur RE. Journal of Nuclear Medicine, Vol 36, No 7:1141-49, 1995.
4. **Flexural rigidity in partially demineralized diaphyseal bone grafts.** Lewandrowski KU, Tomford WW, Yeadon A, Deutsch TF, Mankin HJ, Uthoff HK. Clinical Orthopaedics 317:254-62, 1995.
5. **Enhancement of incorporation of partially demineralized and laser- perforated cortical bone grafts.** Lewandrowski KU, Tomford WW, Schomacker KT, Deutsch TF, Mankin HJ. Transactions of the Orthopaedic Research Society, 41:84-14, 1995.
6. **Classification of articular cartilage lesions of the knee at arthroscopy.** Lewandrowski KU, Ekkernkamp A, David A, Muhr G, Schollmeier G. The American Journal for Knee Surgery, Summer, Vol 9, No. 3:121-28, 1996.
7. **Kinetics of cortical bone demineralization: Controlled demineralization - a new method for modifying cortical bone allografts.** Lewandrowski KU, Venugopalan V, Tomford WW, Schomacker KT, Mankin HJ, Deutsch TF. J Biomedical Materials & Research, Vol. 31:365-72, 1996.
8. **Use of the Er:YAG Laser for improved plating in maxillofacial Surgery: Comparison of Bone Healing in Laser and Drill Osteotomies.** Lewandrowski KU, Lorente C, Schomacker KT, Flotte TJ, Wilkes JW, Deutsch TF. Lasers in Surgery and Medicine 19:40-45, 1996.
9. **Repopulation of laser-perforated chondroepiphyseal matrix with xenogenic chondrocytes: An experimental model.** Caruso E, Lewandrowski KU, Ohlendorf C, Tomford WW, Zaleske DJ. Journal of Orthopaedic Research, 14:102-107, 1996.
10. **MHC-Restriction of cytotoxic antibodies to bone allografts.** Lewandrowski KU, Tomford WW, Springfield D, Mankin HJ. [German] Langenbecks Arch Chir Suppl. I:117-22, 1996.
11. **Interlocking strength in hydroxyapatite - and titanium-coated implants under weight bearing conditions: A biomechanical and histologic study.** David A, Lewandrowski KU, Eitenmuller J, Muhr G, Pommer A, Bar F, Ostermann PAW. Orthopaedics International Edition, Vol 4, No 3:2-9, 1996
12. **Surgical Correction of Talipes Equinovarus Following Foot and Leg Compartment Syndrome.** David A, Lewandrowski KU, Josten C, Ekkernkamp A, Clasbrummel B, Muhr G. Foot & Ankle, 211:1-6, 1996.
13. **Current concepts review. Immune response to bone allografts and their biological consequences.** [Spanish] Lewandrowski KU, Gonzalez S. Inflamacion, 7:275-84, 1996.

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14. **The dynamic hip screw with support plate--a reliable osteosynthesis for highly unstable "reverse" trochanteric fractures?** (German). David A, Hüfner P, Lewandrowski KU, Pommer A, Muhr G. *Der Chirurg*, 67, No. 11, 1166-73, 1996.
15. **Beschleunigung der Inkorporation allogener Knochentransplantate durch partielle Demineralisierung und Laser-Perforation.** (German) Accelerated incorporation of allogeneic bone transplants following partial demineralization and laser-perforation. Lewandrowski KU, Tomford WW, Ekkernkamp A, Muhr G. *Hefte zu "Der Unfallchirurg"* 1996;257:269-270.
16. **T-Zell Aktivierung nach allogener Knochentransplantation.** (German) T-cell activation following bone allografting. Lewandrowski KU, Ekkernkamp A, Tomford WW, Muhr G. *Langenbecks Archiv für Chirurgie Suppl II* 1996; 1248
17. **Concomitant meniscus and articular cartilage lesions in the femoro-tibial joint.** Lewandrowski KU, Ekkernkamp A, David A, Muhr G, Schollmeier G. *The American Journal of Sports Medicine*, 25(4):486-94, 1997
18. **Modification of cortical bone allografts by partial demineralization and laser-perforation to enhance incorporation.** Lewandrowski KU, Tomford WW, Schomacker KT, Deutsch TF, Mankin HJ. *Journal of Orthop Research*, 15(5):748-56, 1997.
19. **Electron microscopic study of the reaction front in acid demineralization of cortical bone.** Lewandrowski KU, Tomford WW, Michaud NA, Flotte TJ, Venugopalan V, Schomacker KT, Mankin HJ, Deutsch TF. *Calcified Tissue International*. 61(4):294-7, 1997.
20. **Mechanical properties of laser-perforated and partially demineralized diaphyseal bone grafts.** Lewandrowski KU, Tomford WW, Uthoff HK. *Clinical Orthopaedics*, 353:238-246, 1998.
21. **Mechanical evaluation of incorporation of laser-perforated and partially demineralized cortical bone allografts.** Lewandrowski KU, Schollmeier G, Ekkernkamp A, Tomford WW, Uthoff HK, *Clin Orthop*. 1998 Aug;(353):238-46.
22. **Effect of a poly(propylene fumarate) Foaming cement on Healing of Bone Defects.** Kai-Uwe Lewandrowski, Maurice V. Cattaneo, Joseph D. Gresser, Donald L. Wise, Roslyn L. White, Lawrence Bonassar, Debra J. Trantolo, *Tissue Eng*. 1999;5(4):305-316.
23. **Role of bone bark during growth in width of tubular bones. A study in human fetuses.** Schollmeier G, Uthoff HK, Lewandrowski KU, Fukuhara K. *Clin Orthop*. 1999 Oct;(367):291-9.
24. **Augmentation of osteoinduction with a biodegradable poly(propylene glycol-co-fumaric acid) bone graft extender. A histologic and histomorphometric study in rats.** Lewandrowski KU, Bondre S, Gresser JD, Silva AE, Wise DL, Trantolo D. *J Biomed Mater Eng*. 1999;9(5-6):325-34.
25. **Improved osteoconduction of cortical bone grafts by biodegradable foam coating.** Lewandrowski KU, Bondre SP, Gresser JD, Wise DL, Tomford WW, Trantolo DJ. *Biomed Mater Eng*. 1999;9(5-6):265-75.
26. **Effect of a poly(propylene fumarate) foaming cement on the healing of bone defects.** Lewandrowski KU, Cattaneo MV, Gresser JD, Wise DL, White RL, Bonassar L, Trantolo DJ. *Tissue Eng*. 1999 Aug;5(4):305-16.
27. **Osteoconductivity of an Injectable and Bioresorbable Poly(propylene glycol-co-fumaric acid) bone cement.** Kai-Uwe Lewandrowski, Joseph D. Gresser, Donald L. Wise, Roslyn L. White, and Debra J. Trantolo, *Biomaterials*. 2000 Feb;21(3):293-8.
28. **Developing Porosity Of Poly(Propylene Glycol-Co-Fumaric Acid) Bone Graft Substitutes And The Effect On Osteointegration: A Preliminary Study in Rats.** Kai-Uwe Lewandrowski, Joseph D. Gresser, Donald L. Wise, and Debra J. Trantolo, *J Biomater Sci Polym Ed*. 2000;11(8):879-89.
29. **Bioresorbable bone graft substitutes of different osteoconductivities: a histologic evaluation of osteointegration of poly(propylene glycol-co-fumaric acid)-based cement implants in rats.** Lewandrowski KU, Gresser JD, Wise DL, Trantolo DJ *Biomaterials*. 2000 Apr;21(8):757-64.
30. **Osteoconductivity of an injectable and bioresorbable poly(propylene glycol-co-fumaric acid) bone cement.** Lewandrowski KU, Gresser JD, Wise DL, White RL, Trantolo DJ. *Biomaterials*. 2000 Feb;21(3):293-8.
31. **Observations on fiber-forming collagens in the anulus fibrosus.** Schollmeier G, Lahr-Eigen R, Lewandrowski KU. *Spine* 2000 Nov 1;25(21):2736-41.
32. **Experimental anterior spine fusion using bovine bone morphogenetic protein: a study in rabbits.** Muschik M, Schlenzka D, Ritsila V, Tennstedt C, Lewandrowski KU. *J Orthop Sci* 2000;5(2):165-70.

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33. **High strength bioresorbable bone plates: preparation, mechanical properties and in vitro analysis.** Hasirci V, Lewandrowski KU, Bondre SP, Gresser JD, Trantolo DJ, Wise DL. *Biomed Mater Eng* 2000;10(1):19-29.
34. **Advances in the biology of spinal fusion: Growth factors and gene therapy.** K.U Lewandrowski, R. Ozuna, F.X. Pedlow, A.C. Hecht. *Current Opinion in Orthopaedics*. Volume 11, No. 3, pp. 167-75, June 2000.
35. **Biodegradable foam coating of cortical allografts.** Bondre S, Lewandrowski KU, Hasirci V, Cattaneo MV, Gresser JD, Wise DL, Tomford WW, Trantolo DJ. *Tissue Eng* 2000 Jun;6(3):217-27.
36. **Tissue responses to molecularly reinforced polylactide-co-glycolide implants.** Lewandrowski KU, Gresser JD, Wise DL, Trantolo DJ, Hasirci V. *J Biomater Sci Polym Ed* 2000;11(4):401-14.
37. **Versatility of biodegradable biopolymers: degradability and an in vivo application.** Hasirci V, Lewandrowski K, Gresser JD, Wise DL, Trantolo DJ. *J Biotechnol* 2001 Mar 30;86(2):135-50.
38. **Incorporation of perforated and demineralized cortical bone allografts Part I: Radiographic and histologic evaluation.** *Journal of Bio-Medical Materials and Engineering*. Volume 11, Number 3, July 2001.
39. **Incorporation of perforated and demineralized cortical bone allografts Part II: A mechanical evaluation.** *Journal of Bio-Medical Materials and Engineering*. Volume 11, Number 3, July 2001.
40. **Mechanical comparison of biodegradable intervertebral lumbar cages.** C. Khodadadyan-Klostermann, F. Kandziora, K. J. Schnake, K. U. Lewandrowski, D. Wise, A. Weiler and N. P. Haas, *Chirurg* 72, 1431-1438 (2001).
41. **Vertical rib expansion for thoracic insufficiency syndrome — Indications and technique.** K.U. Lewandrowski,, R.M. Campbell, Jr., J.B. Emans. *The Orthopaedic Journal at Harvard Medical School*. Volume 3, July 2001, pp. 65-73.
42. **Porous Poly(propylene Fumarate) Foam Coating of Orthotopic Cortical Bone Grafts for Improved Osteoconduction.** K. U. Lewandrowski, S. Bondre, D. D. Hile, B. M. Thompson, D. L. Wise, W. W. Tomford and D. J. Trantolo, *Tissue Eng* 8, 1017-1027 (2002).
43. **Composite poly(lactide)/hydroxylapatite screws for fixation of osteochondral osteotomies. A morphometric, histologic and radiographic study in sheep.** K. U. Lewandrowski, S. P. Bondre, M. Shea, C. M. Untch, W. C. Hayes, D. D. Hile, D. L. Wise and D. J. Trantolo, *J Biomater Sci Polym Ed* 13, 1241-1258 (2002).
44. **Healing of osteochondral osteotomies after fixation with a hydroxyapatite-buffered polylactide. A histomorphometric and radiographic study in rabbits.** K. U. Lewandrowski, S. P. Bondre, D. L. Wise and D. J. Trantolo, *Biomed Mater Eng* 12, 259-270 (2002).
45. **Biomechanical analysis of biodegradable interbody fusion cages augmented With poly(propylene glycol-co-fumaric acid).** F. Kandziora, R. Pflugmacher, R. Kleemann, G. Duda, D. L. Wise, D. J. Trantolo and K. U. Lewandrowski, *Spine* 27, 1644-1651 (2002).
46. **Quantitative measures of osteoinductivity of a porous poly(propylene fumarate) bone graft extender.** K. U. Lewandrowski, D. D. Hile, B. M. Thompson, D. L. Wise, W. W. Tomford and D. J. Trantolo, *Tissue Eng* 9, 85-93 (2003).
47. **Composite resorbable polymer/hydroxylapatite composite screws for fixation of osteochondral osteotomies.** Lewandrowski KU, Bondre SP, Shea M, Untch CM, Hayes WC, Hile DD, Wise DL, Trantolo DJ. *Biomed Mater Eng*. 2002;12(4):423-38.
48. **Evaluation of a porous, biodegradable biopolymer scaffold for mandibular reconstruction.** Trantolo DJ, Sonis ST, Thompson BM, Wise DL, Lewandrowski KU, Hile DD. *Int J Oral Maxillofac Implants*. 2003 Mar-Apr;18(2):182-8.
49. **Enhanced bioactivity of a poly(propylene fumarate) bone graft substitute by augmentation with nano-hydroxyapatite.** Lewandrowski KU, Bondre SP, Wise DL, Trantolo DJ. *Biomed Mater Eng*. 2003;13(2):115-24.
50. **Diastematomyelia presenting as progressive weakness in an adult after spinal fusion for adolescent idiopathic scoliosis.** Lewandrowski KU, Rachlin JR, Glazer PA. *Spine J*. 2004 Jan-Feb;4(1):116-9.
51. **Anterior Spinal Arthrodesis With Structural Cortical Allografts and Instrumentation for Spine Tumor Surgery.** Lewandrowski, Kai-Uwe MD*; Hecht, Andrew C. MD*; DeLaney, Thomas F. MD†; Chapman, Peter A.†; Hornicek, Francis J. MD, PhD*; Pedlow, Frank. *Spine* 2004, 29(10), 1150-1158.
52. **A role for vertebral biopsy in selected patients with known malignancy. A report of three cases.** [Lewandrowski KU](#), [Togawa D](#), [Bauer TW](#), [McLain RE](#). *J Bone Joint Surg Am*. 2005 Jun;87(6):1348-53.

53. Pin-site myiasis: a rare complication of halo orthosis. [Park P, Lodhia KR, Eden SV, Lewandrowski KU, McGillicuddy JE](#). Spinal Cord. 2005 Jun 21.
54. A Poly(Propylene Glycol-co-Fumaric Acid) Based Bone Graft Extender for Lumbar Spinal Fusion: In vivo Assessment in a Rabbit Model. Hile DD, Kandziora F, Lewandrowski KU, Doherty SA, Kowaleski MP, Trantolo DJ. Eur Spine J. 2006 Jun;15(6):936-43.
55. Cord and cauda equina injury complicating elective orthopedic surgery. [Lewandrowski KU, McLain RF, Lieberman I, Orr D](#). Spine. 2006 Apr 20;31(9):1056-9.
56. Atraumatic odontoid fractures in patients with rheumatoid arthritis. [Lewandrowski KU, Park PP, Baron JM, Curtin SL](#). Spine J. 2006 Sep-Oct;6(5):529-33.
57. Three-level bilateral pediculolysis following osteoporotic lumbar compression fracture. [Smith JL, Goorman SD, Baron JM, Curtin SL, Lewandrowski KU](#). Spine J. 2006 Sep-Oct;6(5):539-43. Epub 2006 Jul 24.
58. Vertebral osteolysis after posterior interbody lumbar fusion with recombinant human bone morphogenetic protein 2: a report of five cases. Lewandrowski KU, Nanson C, Calderon R. Spine J. 2007 Sep-Oct;7(5):609-14.
59. Microdiscectomy Spinal Anesthesia Offers Optimal Results in General Patient Population. McLain RF, Tetzlaff JE, Bell GR, Lewandrowski KU, Yoon HJ, Rana M. J Surgical Orthopaedic Advances, 2007, 16(1); 5-11.
60. Brachial neuritis: an under-recognized cause of upper extremity paresis after cervical decompression surgery. Park P, Lewandrowski KU, Ramnath S, Benzel EC. Spine. 2007 Oct 15;32(22):E640-4.
61. "Outside-in" technique, clinical results, and indications with transforaminal lumbar endoscopic surgery: a retrospective study on 220 patients on applied radiographic classification of foraminal spinal stenosis. Lewandrowski KU. Int J Spine Surg. 2014 Dec 1;8.
62. Intradiscal Expandable Balloon Distraction During Transforaminal Decompression for Lumbar Foraminal and Lateral Recess Stenosis. Lewandrowski KU, Ostergren M, de Carvalho PST. Surg Innov. 2018 Apr;25(2):165-173.
63. Surgical Technique of Endoscopic Transforaminal Decompression and Fusion with a Threaded Expandable Interbody Fusion Cage and A Report of 24 Cases. Lewandrowski KU. J Spine 2018, 7:2.
64. Endoscopic Transforaminal and Lateral Recess Decompression After Previous Spinal Surgery. Lewandrowski KU. International Journal of Spine Surgery. Vol. 12, No. 2, 2018, pp. 1–14. 8
65. Readmissions After Outpatient Transforaminal Decompression For Lumbar Foraminal And Lateral Recess Stenosis. Lewandrowski KU. International Journal of Spine Surgery, Vol. 12, No. 3, 2018, pp. 1–10.
66. Incidence, Cost, and Management of Complications after Transforaminal Endoscopic Decompression Surgery for Lumbar Foraminal and Lateral Recess Stenosis: A Value Proposition for Outpatient Ambulatory Surgery. Lewandrowski KU. Int J Spine Surg. February 2019, 13 (1) 53-67; DOI: <https://doi.org/10.14444/6008>.
67. Positive Predictive Value of Diagnostic Epidural Steroid Injection for Successful Outcome after Outpatient Transforaminal Decompression for Lumbar Foraminal and Lateral Recess Stenosis. Lewandrowski KU. Clin Neurol Neurosurg. 2018 Oct;173:38-45. <https://doi.org/10.1016/j.clineuro.2018.07.015>
68. Retrospective analysis of accuracy and positive predictive value of preoperative lumbar MRI grading after successful outcome following outpatient endoscopic decompression for lumbar foraminal and lateral recess stenosis. Lewandrowski KU. Clin Neurol Neurosurg. 2019 March; 179: <https://doi.org/10.1016/j.clineuro.2019.02.019>
69. Use of "Inside-Out" Technique for Direct Visualization of a Vacuum Vertically Unstable Intervertebral Disc During Routine Lumbar Endoscopic Transforaminal Decompression—A Correlative Study of Clinical Outcomes and the Prognostic Value of Lumbar Radiographs. Lewandrowski KU, Ramirez Leon RF, Yeung, A. International Journal of Spine Surgery, 2019, 13(5): 399-414. <https://doi.org/10.14444/6055>.
70. Early And Staged Endoscopic Management of Common Pain Generators In The Spine. Yeung A, Lewandrowski KU. Journal of Spine Surgery. Jan 2020, 6(Suppl 1): S1-S5. <http://dx.doi.org/10.21037/jss.2019.09.03>
71. Five-Year Clinical Outcomes With Endoscopic Transforaminal Foraminoplasty For Symptomatic Degenerative Conditions Of The Lumbar Spine: A Comparative Study of Inside-Out Versus Outside-In Techniques. Yeung A, Lewandrowski KU. Journal of Spine Surgery. 2019, 2020 Jan;6(Suppl 1):S66-S83. <http://dx.doi.org/10.21037/jss.2019.06.08>.

72. **Is Asia Truly A Hotspot Of Contemporary Minimally Invasive And Endoscopic Spinal Surgery?** Jin-Sun Kim, Yeung A, Lewandrowski KU. Journal of Spine Surgery. 2020 Jan;6(Suppl 1):S224-S236.
<http://dx.doi.org/10.21037/jss.2019.12.13>.
73. **Five-Year Clinical Outcomes With Endoscopic Transforaminal Outside-In Foraminoplasty Techniques For Symptomatic Degenerative Conditions of The Lumbar Spine.** Lewandrowski KU, Ransom NA. Journal of Spine Surgery. 2019, 2020 Jan;6(Suppl 1):S54-S65. <http://dx.doi.org/10.21037/jss.2019.07.03>
74. **Lumbar Vacuum Disc, Vertical Instability, Standalone Endoscopic Interbody Fusion, And Other Treatments: An Opinion Based Survey Among Minimally Invasive Spinal Surgeons.** Lewandrowski KU, Xifeng Z, Ramírez León RF, Teixeira de Carvalho PS, Hellinger S, Yeung A. Journal of Spine Surgery. 2020 Jan;6(Suppl 1):S165-S178. <http://dx.doi.org/10.21037/jss.2019.11.02>.
75. **Meaningful Outcome Research To Validate Endoscopic Treatment of Common Lumbar Pain Generators With Durability Analysis.** Lewandrowski KU, Yeung A. Journal of Spine Surgery. 2020 Jan;6(Suppl 1):S6-S13. <http://dx.doi.org/10.21037/jss.2019.09.07>
76. **Navigating The Learning Curve Of Spinal Endoscopy As An Established Traditionally Trained Spine Surgeon.** Ransom NA, Gollogly S, Lewandrowski KU, Yeung A. Journal of Spine Surgery. 2020 Jan;6(Suppl 1):S197-S207. <http://dx.doi.org/10.21037/jss.2019.10.03>.
77. **Outcomes With Transforaminal Endoscopic Versus Percutaneous Laser Decompression For Contained Lumbar Herniated Disc: A Survival Analysis of Treatment Benefit.** Lewandrowski KU, Teixeira de Carvalho PS, Calderaro AL, Soares dos Santos T, de Lima e Silva MS, de Carvalho Jr. P, Yeung A. Journal of Spine Surgery. 2020 Jan;6(Suppl 1):S84-S99. <http://dx.doi.org/10.21037/jss.2019.09.13>.
78. **Patient Selection Protocols For Endoscopic Transforaminal, Interlaminar, And Translaminar Decompression of Lumbar Spinal Stenosis.** Dowling A, Lewandrowski KU, Pinto da Silva FH, Araneda Parra JA, Molero Portillo D, Pineda Giménez YC. Journal of Spine Surgery. 2020 Jan;6(Suppl 1):S120-S132. <http://dx.doi.org/10.21037/jss.2019.11.07>.
79. **Regional Variations In Acceptance, And Utilization Of Minimally Invasive Spinal Surgery Techniques Among Spine Surgeons: Results of A Global Survey.** Lewandrowski KU, Soriano-Sánchez JA, Xifeng Z, Ramírez León RF, Soriano Solis S, Rugeles Ortiz JG, Ramírez Martínez C, Alonso Cuéllar GO, Liu KX, Fu Q, de Lima e Silva MS, Teixeira de Carvalho PS, Hellinger S, Dowling A, Prada N, Choi G, Datar G, Yeung A. Journal of Spine Surgery. 2020 Jan;6(Suppl 1):S260-S274. <http://dx.doi.org/10.21037/jss.2019.09.31>.
80. **Return To Work And Recovery Time Analysis After Outpatient Endoscopic Lumbar Transforaminal Decompression Surgery.** Lewandrowski KU, Ransom NA, Yeung A. Journal of Spine Surgery. 2020 Jan;6(Suppl 1):S100-S115. <http://dx.doi.org/10.21037/jss.2019.10.01>.
81. **Standalone Lordotic Endoscopic Wedge Lumbar Interbody Fusion (LEW-LIF™) With A Threaded Cylindrical Peek Cage: Report Of Two Cases.** Ramírez León JF, Silva Ardila A, Rugeles Ortiz JG, Ramírez Martínez C, Alonso Cuéllar GO, Infante J, Lewandrowski KU. Journal of Spine Surgery. 2020 Jan;6(Suppl 1):S275-S284. <http://dx.doi.org/10.21037/jss.2019.06.09>.
82. **Subsidence Induced Recurrent Radiculopathy After Staged Two-Level Standalone Endoscopic Lumbar Interbody Fusion With A Threaded Cylindrical Cage: A Case Report.** Lewandrowski KU, Ransom NA, Yeung A. Journal of Spine Surgery. 2020 Jan;6(Suppl 1):S286-S293. <http://dx.doi.org/10.21037/jss.2019.09.25>.
83. **Surgeon Motivation, And Obstacles To The Implementation Of Minimally Invasive Spinal Surgery Techniques.** Lewandrowski KU, Soriano-Sánchez JA, Xifeng Z, Ramírez León RF, Soriano Solis S, Rugeles Ortiz JG, Ramírez Martínez C, Alonso Cuéllar GO, Liu KX, Fu Q, de Lima e Silva MS, Teixeira de Carvalho PS, Hellinger S, Dowling A,

- Prada N, Choi G, Datar G, Yeung A. Journal of Spine Surgery. 2019, Ahead of Print. <http://dx.doi.org/10.21037/jss.2019.08.02>
85. **Surgeon Training And Clinical Implementation of Spinal Endoscopy In Routine Practice: Results Of A Global Survey.** Lewandrowski KU, Soriano-Sánchez JA, Xifeng Z, Ramírez León RF, Soriano Solis S, Rugeles Ortiz JG, Ramírez Martínez C, Alonso Cuéllar GO, Liu KX, Fu Q, de Lima e Silva MS, Teixeira de Carvalho PS, Hellinger S, Dowling A, Prada N, Choi G, Datar G, Yeung A. Journal of Spine Surgery. (Suppl 1):S237-S248. <http://dx.doi.org/10.21037/jss.2019.09.32>.
 86. **Technology Advancements In Spinal Endoscopy For Staged Management of Painful Spine Conditions.** Tieber F, Lewandrowski KU. Journal of Spine Surgery. 2020 Jan;6(Suppl 1):S19-S28. <http://dx.doi.org/10.21037/jss.2019.10.02>.
 87. **The Strategies Behind “Inside-Out” And “Outside-In” Endoscopy of The Lumbar Spine: Treating The Pain Generator.** Lewandrowski KU. Journal of Spine Surgery. 2019, 2020 Jan;6(Suppl 1):S35-S39. <http://dx.doi.org/10.21037/jss.2019.06.06>
 88. **Clinical Outcomes With Endoscopic Resection of Lumbar Extradural Cysts.** Hellinger S, Lewandrowski KU. Journal of Spine Surgery. 2019, Ahead of Print. <http://dx.doi.org/10.21037/jss.2019.08.08>
 89. **Indication And Contraindication Of Endoscopic Transforaminal Lumbar Decompression.** Lewandrowski KU, Dowling Á, de Carvalho P, Calderaro AL, Dos Santos TS, de Lima E Silva MS, Ramírez León JF, Yeung A. World Neurosurg. 2020 Mar 19. pii: S1878-8750(20)30547-7. <http://dx.doi.org/10.1016/j.wneu.2020.03.076>.
 90. **Minimal Clinically Important Difference in Patient-Reported Outcome Measures with the Transforaminal Endoscopic Decompression for Lateral Recess and Foraminal Stenosis.** Lewandrowski KU, DE Carvalho PST, DE Carvalho P, Yeung A. Int J Spine Surg. 2020 Apr 30;14(2):254-266. DOI: <https://doi.org/10.14444/7034>. eCollection 2020 Apr. PMID: 32355633.
 91. **Transforaminal endoscopic decompression and uninstrumented allograft lumbar interbody fusion: A feasibility study in patients with end-stage vacuum degenerative disc disease.** Dowling Á, Hernández-Bárcenasb JG, Lewandrowski KU. Clin Neurol Neurosurg. <https://doi.org/10.1016/j.clineuro.2020.106002>. Clin Neurol Neurosurg. 2020 Sep;196:106002. doi: 10.1016/j.clineuro.2020.106002. Epub 2020 Jun 9.
 92. **Dysethesia due to irritation of the dorsal root ganglion following lumbar transforaminal endoscopy: Analysis of frequency and contributing factors.** Lewandrowski KU, Dowling Á, Calderaro AL, Dos Santos TS, Bergamaschi JPM, León JFR, Yeung A. Clin Neurol Neurosurg. 2020 Oct;197:106073. <http://dx.doi.org/10.1016/j.clineuro.2020.106073>. Epub 2020 Jul 13.
 93. **Lumbar Endoscopic Bony and Soft Tissue Decompression With the Hybridized Inside-Out Approach: A Review And Technical Note.** Lewandrowski KU, Yeung A. Neurospine. 2020 Jul;17(Suppl 1):S34-S43. <http://dx.doi.org/10.14245/ns.2040160.080>. Epub 2020 Jul 31.
 94. **Anesthesia for Endoscopic Spine Surgery of the Spine In an Ambulatory Surgery Center.** Abrão J, Dowling Á, Ramírez León RF, Lewandrowski KU. Global Journal of Anesthesia & Pain Medicine (GJAPM) 3(5): 326-336.
 95. **Editors' Introduction: Modern Technology Applications in Minimally Invasive Spine Surgery Techniques.** Lewandrowski KU, Coric D, Yeung A, Wang MY. Int J Spine Surg 14(s3): S3. <http://dx.doi.org/10.14444/7120>.
 96. **Current Concepts of Contemporary Expandable Lumbar Interbody Fusion Cage Designs: An Editorial on Their Biomechanical Characteristics, Part 1.** Cheng BC, Swink I, Yusufbekov R, Birgelen M, Ferrara L, Lewandrowski KU, Coric D. Int J Spine Surg. 2020 Oct 29:7128. <http://dx.doi.org/10.14444/7128>.
 97. **Expandable Interbody Fusion Cages: An Editorial on the Surgeon's Perspective on Recent Technological Advances and Their Biomechanical Implications.** Lewandrowski KU, Ferrara L, Cheng B. Int J Spine Surg. 2020 Oct 29:7127. <http://dx.doi.org/10.14444/7127>.

98. **Feasibility of Using Intraoperative Neuromonitoring in the Prophylaxis of Dysesthesia in Transforaminal Endoscopic Discectomies of the Lumbar Spine.** de Carvalho PST, Ramos MRF, da Silva Meireles AC, Peixoto A, de Carvalho P Jr, Ramírez León JF, Yeung A, Lewandrowski KU. Brain Sci. 2020 Aug 5;10(8):522. <http://dx.doi.org/10.3390/brainsci10080522>.
99. **Reliability Analysis of Deep Learning Algorithms for Reporting of Routine Lumbar MRI Scans.** Lewandrowski KU, Muraleedharan N, Eddy SA, Sobti V, Reece BD, León JFR, Shah S. Int J Spine Surg. 2020 Oct 29:7132. <http://dx.doi.org/10.14444/7132>.
100. **Artificial Intelligence Comparison of the Radiologist Report With Endoscopic Predictors of Successful Transforaminal Decompression for Painful Conditions of the Lumbar Spine: Application of Deep Learning Algorithm Interpretation of Routine Lumbar Magnetic Resonance Imaging Scan.** Lewandrowski KU, Muraleedharan N, Eddy SA, Sobti V, Reece BD, Ramírez León RJ, Shah S. Int J Spine Surg 2020 Dec;14(s3):S75-S85. <http://dx.doi.org/10.14444/7130>.
101. **Transforaminal Endoscopic Discectomy Combined With an Interspinous Process Distraction System for Spinal Stenosis.** Martínez CR, Lewandrowski KU, Ortíz JGR, Cuéllar GOA, León JFR. Int J Spine Surg. 2020 Oct 29:7121. <http://dx.doi.org/10.14444/7121>.
102. **Endoscopic Transforaminal Lumbar Interbody Fusion With a Single Oblique PEEK Cage and Posterior Supplemental Fixation.** Dowling Á, Lewandrowski KU. Int J Spine Surg. 2020 Oct 29:7126. <http://dx.doi.org/10.14444/7126>.
103. **Minimally invasive debridement and drainage using intraoperative CT-Guide in multilevel spondylodiscitis: a long-term follow-up study.** Xu J, Zhang L, Bu R, Liu Y, Lewandrowski KU, Zhang X. BMC Musculoskelet Disord 22(1): 120. 2021 Jan 29;22(1):120. <http://dx.doi.org/10.1186/s12891-021-03988-1>.
104. **Full Endoscopic Lumbar Discectomy Versus Laminectomy for Cauda Equina Syndrome.** Yankang L, Leiming Z, Lewandrowski KU, Xiangyu T, Zexing Z, Jianbiao X, Lin Z, Heng Y, Xifeng Z. Int J Spine Surg 2021, 15(1): 105-112. <http://dx.doi.org/10.14444/8014>.
105. **Dural Tears During Lumbar Spinal Endoscopy: Surgeon Skill, Training, Incidence, Risk Factors, and Management.** Lewandrowski KU, Hellinger S, De Carvalho PST, Freitas Ramos MR, Soriano-Sánchez JA, Xifeng Z, Calderaro AL, Dos Santos TS, Ramírez León JF, Silva de Lima EMS, Dowling Á, Datar RG, Kim JS, Yeung A. Int J Spine Surg 2021, 15(2): 280-294. <http://dx.doi.org/10.14444/8038>.
106. **Full-Endoscopic Oblique Lateral Lumbar Interbody Fusion: A Technical Note With 1-Year Follow-Up.** Zhen-Zhou Li, Jin-Chang Wang, Zheng Cao, Hong-Liang Zhao, Lewandrowski KU, Yeung A. Int J Spine Surg 2021 May 7;8072. <http://dx.doi.org/10.14444/8072>.
107. **Minimally Invasive Posterior Tubular Microsurgical Approach for the Management of Symptomatic Synovial Cysts of the Lumbar and Cervical Spine.** Soriano Sánchez JA, Lewandrowski KU, Franco Jiménez JA, Soto Garcia ME, Solís SS, García MR, Escandón OS, Romero Rangel JAI. Int J Spine Surg. 2021 Oct;15(5):1014-1024. <http://dx.doi.org/10.14444/8134>.
108. **Difficulties, Challenges, and the Learning Curve of Avoiding Complications in Lumbar Endoscopic Spine Surgery.** Lewandrowski KU, Telfeian AE, Hellinger S, Jorge Felipe Ramírez León, Paulo Sérgio Teixeira de Carvalho, Ramos MRF, Kim HS, Hanson DW, Salari N, Yeung A. Int J Spine Surg. 2021 Dec;15(suppl 3):S21-S37. <http://dx.doi.org/10.14444/8161>.
109. **Patient selection criteria for percutaneous anterior cervical laser versus endoscopic discectomy.** Hellinger S, Knight M, Telfeian AE, Lewandrowski KU. Lasers Surg Med. 2022 Apr;54(4):530-539. <http://dx.doi.org/10.1002/lsm.23514>.

110. **Durability of Endoscopes Used During Routine Lumbar Endoscopy: An Analysis of Use Patterns, Common Failure Modes, Impact on Patient Care, and Contingency Plans.** Lewandrowski KU, Tieber F, Hellinger S, Teixeira de Carvalho PS, Freitas Ramos MR, Xifeng Z, Calderaro AL, Santos TSD, Ramírez León JF, de Lima E Silva MS, Datar G, Kim JS, Kim HS, Yeung A. *Int J Spine Surg.* 2021 Dec;15(6):1135-1148. <http://dx.doi.org/10.14444/8146>.
111. **Editors' Commentary: The Effect of Vitamin D Deficiency on Outcomes of Patients Undergoing Elective Spinal Fusion Surgery: A Systematic Review and Meta-Analysis by Khalooeifard et al.** Lewandrowski KU, Lorio MP. *Int J Spine Surg.* 2022 Feb;16(1):2-3. <http://dx.doi.org/10.14444/8170>.
112. **A Differential Clinical Benefit Examination of Full Lumbar Endoscopy vs Interspinous Process Spacers in the Treatment of Spinal Stenosis: An Effect Size Meta-Analysis of Clinical Outcomes.** Lewandrowski KU, Abraham I, Ramírez León JF, Cantú-Leal R, Longoria RC, Soriano Sánchez JA, Yeung A. *Int J Spine Surg.* 2022 Feb;16(1):102-123. <http://dx.doi.org/10.14444/8200>.
113. **Awake, Transforaminal Endoscopic Lumbar Spine Surgery in Octogenarians: Case Series.** Telfeian AE, Sastry R, Oyelese A, Fridley J, Camara-Quintana JQ, Niu T, Sampath P, Lewandrowski KU, Mueller K, Gokaslan ZL. *Pain Physician.* 2022 Mar;25(2):E255-E262. PMID: 35322980.
114. **Endoscopic Techniques for Lumbar Interbody Fusion: Principles and Context.** Zheng B, Shaaya E, Feler J, Leary OP, Hagan MJ, Bajaj A, Fridley JS, Hassel F, Gardocki R, Grau RC, Lewandrowski KU, Telfeian AE. *Biomed Res Int.* 2022 Mar 19;2022:4979231. <http://dx.doi.org/10.1155/2022/4979231>.
115. **Differential Agnostic Effect Size Analysis of Lumbar Stenosis Surgeries.** Lewandrowski KU, Abraham I, Ramírez León JF, Soriano Sánchez JA, Dowling Á, Hellinger S, Freitas Ramos MR, Teixeira De Carvalho PS, Yeung C, Salari N, Yeung A. *Int J Spine Surg.* 2022 Apr;16(2):318-342. <http://dx.doi.org/10.14444/8222>.
116. **Magnetic Resonance Imaging Documentation of Approach Trauma With Lumbar Endoscopic Interlaminar, Translaminar, Compared to Open Microsurgical Discectomy.** Hellinger S, Telfeian AE, Lewandrowski KU. *Int J Spine Surg.* 2022 Apr;16(2):343-352. <http://dx.doi.org/10.14444/8226>.
117. **Foraminal Access Strategies in Patients with Lumbar Posterolateral Fusions in Transforaminal Endoscopic Spine Surgery: Case Series and Technical Note.** Telfeian A, Bajaj A, Sastry R, Ali R, Oyelese A, Fridley J, Camara-Quintana JQ, Niu T, Lewandrowski KU, Gokaslan ZL. *Pain Physician.* 2022 May;25(3):E449-E455.
118. **A Proposed Personalized Spine Care Protocol (SpineScreen) to Treat Visualized Pain Generators: An Illustrative Study Comparing Clinical Outcomes and Postoperative Reoperations between Targeted Endoscopic Lumbar Decompression Surgery, Minimally Invasive TLIF and Open Laminectomy.** Lewandrowski KU, Abraham I, Ramírez León JF, Telfeian AE, Lorio MP, Hellinger S, Knight M, De Carvalho PST, Ramos, MRF, Dowling Á, Rodríguez García M, Muhammad F, Hussain N, Yamamoto V, Kateb B, Yeung A. *J Pers Med.* 2022 Jun 29;12(7):1065. <http://dx.doi.org/10.3390/jpm12071065>.
119. **Awake, Transforaminal Endoscopic Lumbar Decompression Surgery to Treat L5-S1 Adjacent Segment Disease: A Case Series.** Telfeian AE, Sastry R, Ali R, Oyelese A, Fridley J, Camara-Quintana JQ, Niu T, Lewandrowski KU, Gokaslan ZL. *Pain Physician.* 2022 Jul;25(4):E649-E656.
120. **Awake transforaminal endoscopic lumbar facet cyst resection: technical note and case series.** Hagan MJ, Telfeian AE, Sastry R, Ali R, Lewandrowski KU, Konakondla S, Barber S, Lane K, Gokaslan ZL. *J Neurosurg Spine.* 2022 Aug 19:1-8. <http://dx.doi.org/10.3171/2022.6>.
121. **Navigation Techniques in Endoscopic Spine Surgery.** Hagan MJ, Remacle T, Leary OP, Feler J, Shaaya E, Ali R, Zheng B, Bajaj A, Traupe E, Kraus M, Zhou Y, Fridley JS, Lewandrowski KU, Telfeian AE. *Biomed Res Int.* 2022 Aug 29;2022:8419739. <http://dx.doi.org/10.1155/2022/8419739>.
122. **Joint International SILACO, SICCMII, ISASS Symposium as a Model for a Collaborative Framework to Create Literature on Advances in Spine Surgery, Patient Care, and Policy.** Lewandrowski KU, Moyano J, Lorio MP,

- Ramírez León JF, Braxton E, Menez C, Martínez CR, Rugeles-Ortiz JG, Garcia MR, Telfeian AE, Duchon L, Dowling Á, Yeung A. *Int J Spine Surg.* 2022 Oct;16(5):767-771. <http://dx.doi.org/10.14444/8318>.
123. **ISASS Policy Statement 2022: Literature Review of Intraosseous Basivertebral Nerve Ablation.** Lorio M, Clerk-Lamallice O, Rivera M, Lewandrowski KU. *Int J Spine Surg.* 2022 Dec;16(6):1084-1094. <http://dx.doi.org/10.14444/8362>.
 124. **Radiofrequency Treatment of Iliac and Paravertebral Cluneal Nerves for Low Back Pain.** Knight M, Inklebarger J, Telfeian AE, Lewandrowski KU. *Pain Physician.* 2022 Oct;25(7):E1129-E1136.
 125. **Endoscopic Techniques for Spinal Oncology: A Systematic Literature Review.** Ali R, Hagan MJ, Shaaya E, Leary OP, Feler J, Bajaj A, Gokaslan Z, Konakondla S, Mahan MA, Wagner R, Lewandrowski KU, Telfeian AE. *Int J Spine Surg.* 2022 Nov 28:8412. <http://dx.doi.org/10.14444/8412>.
 126. **Breaking through the glass ceiling effect of high-grade clinical evidence creation in orthopaedics & trauma.** Lewandrowski KU, Ramírez León RF, Dowling A, Rodriguez Garcia M, Gabriel Rugeles J, Ramirez C, Garcia A, Valerio J, de Carvalho PST, Duchén Rodríguez LM, Moyano J, Herrera M, Prada N, Zuluaga M, Yeung A. *Revista Colombiana de Ortopedia y Traumatología* 2022, Volume 36, Issue 4, October–December 2022, 215-228. DOI: <https://doi.org/10.1016/j.rccot.2022.10.003>.
 127. **The role of traditional publishing of clinical evidence in the age of modern social media platforms.** Lewandrowski KU, Ramirez León JF, Ramírez C, Herrera M, Prada N, Zuluaga M. *Revista Colombiana de Ortopedia y Traumatología* 2022 Vol. 36 Issue 4 Pages 201-202. DOI: <https://doi.org/10.1016/j.rccot.2022.11.001>
 128. **Spine Surgery in the Chilean Public Health System.** Dowling Á, Lewandrowski KU. *Int J Spine Surg.* 2023 Feb 2:8391. <http://dx.doi.org/10.14444/8391>.
 129. **Is Minimally Invasive Spinal Surgery (MISS) Superior to Endoscopic Spine Surgery in Post-operative Radiological Outcome for Lumbar Spine Degenerative Disease? A Systematic Review.** Patel K, Harikar MM, Venkataram T, Chavda V, Montemurro N, Assefi M, Hussain N, Yamamoto V, Kateb B, Lewandrowski KU, Umana GEE. *J Neurol Surg A Cent Eur Neurosurg.* 2023 Feb 6. <http://dx.doi.org/10.1055/a-2029-2694>.
 130. **Training and Credentialing Standards for Minimally Invasive Spinal Surgery Techniques: Results of a Survey.** Lewandrowski KU, Bergamashi JP, Telfeian AE, de Carvalho PST, Leon JFR. *Pain Physician.* 2023 Jan;26(1):29-37.
 131. **Identification of the Magna Radicular Artery Entry Foramen and Adamkiewicz System: Patient Selection for Open versus Full-Endoscopic Thoracic Spinal Decompression Surgery.** Vargas RA, De Olinveira EM, Moscatelli M, Ramírez León JF, Lorio MP, Fiorelli RK, Telfeian AE, Braxton E, Song M, Lewandrowski KU. *J Pers Med.* 2023 Feb 17;13(2):356. <http://dx.doi.org/10.3390/jpm13020356>.
 132. **Clinical Consequences of Incidental Durotomy during Full-Endoscopic Lumbar Decompression Surgery in Relation to Intraoperative Epidural Pressure Measurements.** Roth A. A. Vargas, Marco Moscatelli, Marcos Vaz de Lima, Jorge Felipe Ramírez León, Morgan P. Lorio, Rossano Kepler Alvim Fiorelli, Albert E. Telfeian, John Fiallos, Ernest Braxton, Michael Song and Kai-Uwe Lewandrowski. *J. Pers. Med.* 2023, 13(3), 381; <https://doi.org/10.3390/jpm13030381>.
 133. **The Academic Impact of the Endoscopy & MIS Chapter of the Mexican Minimally Invasive Spine Surgery Society - AMCICO. El Impacto Académico Del Capítulo De Endoscopia Y Cirugía Minimamente Invasiva De Columna De La Asociación Mexicana De Cirujanos De Columna – AMCICO.** Alfonso Garcia, Eulalio Elizalde Martínez, Adrian García Suárez, Iliana Margarita Gómez Silva, Javier Quillo-Olvera, Félix Domínguez Cortinas, César A. Alcántara Canseco, Manuel Rodriguez Garcia, Sergio Soriano Solis, Stefan Hellinger, Paul Houle, Raymond Gardocki, and Kai-Uwe Lewandrowski. *Coluna/Columna* 2023 Vol. 22 Issue 1 Pages 1-7.
 134. **Personalized Interventional Surgery Of The Lumbar Spine: A Perspective On Minimally Invasive And Neuroendoscopic Decompression For Spinal Stenosis.** Kai-Uwe Lewandrowski, Anthony Yeung, Morgan P Lorio,

- Huilin Yang, Jorge Felipe Ramírez León, José Antonio Soriano Sánchez, Rossano Kepler Fiorelli, Kang Taek Lim, Jaime Moyano, Alvaro Dowling, Juan Marcelo Sea Aramayo, Jeong-Yoon Park, Hyeun Sung Kim, Jiancheng Zeng, Bin Meng, Fernando Alvarado Gómez, Carolina Ramirez, Paulo Sérgio Teixeira De Carvalho, Manuel Rodriguez Garcia, Alfonso Garcia, Eulalio Elizalde Martínez, Iliana Margarita Gómez Silva, Jose Valerio, Luis Miguel Duchén Rodríguez, Robert Meves, Cristiano M Menezes, Luis Eduardo Carelli, Alexandre Fogaça Cristante, Rodrigo Amaral, Geraldo De Sa Carneiro, Helton Defino, Vicky Yamamoto, Babak Kateb. *J. Pers. Med.* Vol. 13 Issue 5 Pages 710. <http://dx.doi.org/10.3390/jpm13050710>.
135. **Would Cutibacterium acnes be the villain for the chronicity of low back pain in degenerative disc disease? Preliminary results of an analytical cohort.** Eliane de Oliveira Ferreira, Vinicius Magno Da Rocha, Carla Ormundo Lima, Gustavo Baptista Candido, Keila Mara Cassiano, Kai-Uwe Lewandrowski, Rossano Kepler Fiorelli. *J. Pers. Med.* 2023 Vol. 13 Issue 4 Pages 598. <http://dx.doi.org/>
 136. **Effect of Quadratus Lumborum Block on Pain and Stress Response after Video Laparoscopic Surgeries.** Virna Guedes Alves Brandão, Gustavo Nascimento Silva, Marcelo Vaz Perez, Kai-Uwe Lewandrowski, Rossano Kepler Fiorelli. *J. Pers. Med.* Vol. 13 Issue 4 Pages 586. <https://www.mdpi.com/2075-4426/13/4/586>.
 137. **Effect of Dexmedetomidine on Immunomodulation and Pain Control in Videolaparoscopic cholecystectomies.** Gustavo Nascimento Silva, Virna Guedes Brandão, Marcelo Vaz Perez, Kai-Uwe Lewandrowski, Rossano Kepler Fiorelli. *J. Pers. Med.* Vol. 13 Issue 4 Pages 622. <http://dx.doi.org/>
 138. **Determination Of Work Related To Endoscopic Decompression Of Lumbar Spinal Stenosis.** Kai-Uwe Lewandrowski, Morgan P Lorio. *J. Pers. Med.* Vol. 13 Issue 4 Pages 614. <https://www.mdpi.com/2075-4426/13/4/622>.
 139. **Randomized Clinical Trials and Observational Tribulations: Providing Clinical Evidence for Personalized Surgical Pain Management Care Models.** Abraham, Ivo, Kai-Uwe Lewandrowski, John C. Elfar, Zong-Ming Li, Rossano Kepler Alvim Fiorelli, Mauricio G. Pereira, Morgan P. Lorio, Benedikt W. Burkhardt, Joachim M. Oertel, Peter A. Winkler, Huilin Yang, Jorge Felipe Ramírez León, Albert E. Telfeian, Álvaro Dowling, Roth A. A. Vargas, Ricardo Ramina, Marjan Asefi, Paulo Sérgio Teixeira de Carvalho, Helton Defino, Jaime Moyano, Nicola Montemurro, Anthony Yeung, Pietro Novellino, and on behalf of Teams/Organizations/Institutions. *Journal of Personalized Medicine* 13, no. 7 (2023): 1044. <https://www.mdpi.com/2075-4426/13/7/1044>.
 140. **Spinal Disease Burden and Priorities of Community Spine Care in the Brazilian Public Health System Vs the United States.** Aparecido Defino, H. L., and K. U. Lewandrowski. *Int J Spine Surg* (Jun 2 2023). <https://dx.doi.org/10.14444/8452>.
 141. **Defining the Patient with Lumbar Discogenic Pain: Real-World Implications for Diagnosis and Effective Clinical Management.** Lorio, M. P., D. P. Beall, A. K. Calodney, K. U. Lewandrowski, J. E. Block, and N. Mekhail. *J Pers Med* 13, no. 5 (May 12 2023). <https://dx.doi.org/10.3390/jpm13050821>.
 142. **Patient Perceptions of Paramedian Minimally Invasive Spine Skin Incisions.** Quiring, Kimberly, Morgan P. Lorio, Jorge Felipe Ramírez León, Paulo Sérgio Teixeira de Carvalho, Rossano Kepler Alvim Fiorelli, and Kai-Uwe Lewandrowski. *Journal of Personalized Medicine* 13, no. 6 (2023): 878. <https://www.mdpi.com/2075-4426/13/6/878>.
 143. **Personalized Medicine in Cancer Pain Management.** Raad, Mohammad, William Omar Contreras López, Alireza Sharafshah, Marjan Assefi, and Kai-Uwe Lewandrowski. *Journal of Personalized Medicine* 13, no. 8 (2023): 1201. <https://www.mdpi.com/2075-4426/13/8/1201>.
 144. **Comparison of Transforaminal Lumbar Interbody Fusion in the Ambulatory Surgery Center and Traditional Hospital Settings, Part 2: Assessment of Surgical Safety in Medicare Beneficiaries.** Schlesinger, Scott M., Dominic

- Maggio, Morgan P. Lorio, Kai-Uwe Lewandrowski, and Jon E. Block. *Journal of Personalized Medicine* 13, no. 3 (2023): 566. <https://www.mdpi.com/2075-4426/13/3/566>.
145. **Durotomy- and Irrigation-Related Serious Adverse Events During Spinal Endoscopy: Illustrative Case Series and International Surgeon Survey.** Vargas, R. A. A., V. Hagel, Z. Xifeng, H. Yang, J. F. Ramírez León, M. Lorio, A. E. Telfeian, P. Houle, R. Gardocki, Á Dowling, P. S. Teixeira de Carvalho, A. Yeung, M. Knight, S. Hellinger, and K. U. Lewandrowski. *Int J Spine Surg* 17, no. 3 (Jun 2023): 387-98. <https://dx.doi.org/10.14444/8454>.
 146. **Clinical Consequences of Incidental Durotomy During Full-Endoscopic Lumbar Decompression Surgery in Relation to Intraoperative Epidural Pressure Measurements.** Vargas, Roth A. A., Marco Moscatelli, Marcos Vaz de Lima, Jorge Felipe Ramírez León, Morgan P. Lorio, Rossano Kepler Alvim Fiorelli, Albert E. Telfeian, John Fiallos, Ernest Braxton, Michael Song, and Kai-Uwe Lewandrowski. *Journal of Personalized Medicine* 13, no. 3 (2023): 381. <https://www.mdpi.com/2075-4426/13/3/381>.
 147. **Endoscopic Posterior Cervical Decompression for Ossified Posterior Longitudinal Ligament: A Technical Note.** Xifeng, Z., J. Zhang, Y. Yan, R. Bu, H. Fan, V. Hagel, A. E. Telfeian, J. F. Ramírez León, M. P. Lorio, and K. U. Lewandrowski. *Int J Spine Surg* (May 25 2023). <https://dx.doi.org/10.14444/8453>.
 148. **The Changing Environment in Postgraduate Education in Orthopedic Surgery and Neurosurgery and Its Impact on Technology-Driven Targeted Interventional and Surgical Pain Management: Perspectives from Europe, Latin America, Asia, and The United States.** Lewandrowski KU, Elfar JC, Li ZM, Burkhardt BW, Lorio MP, Winkler PA, Oertel JM, Telfeian AE, Dowling Á, Vargas RAA, Ramina R, Abraham I, Assefi M, Yang H, Zhang X, Ramírez León JF, Fiorelli RKA, Pereira MG, de Carvalho PST, Defino H, Moyano J, Lim KT, Kim HS, Montemurro N, Yeung A, Novellino P. *J Pers Med*. 2023 May 18;13(5):852. <https://dx.doi.org/10.3390/jpm13050852>.
 149. **International Society for the Advancement of Spine Surgery Statement: Restorative Neurostimulation for Chronic Mechanical Low Back Pain Resulting From Neuromuscular Instability.** Lorio M, Lewandrowski KU, Coric D, Phillips F, Shaffrey CI. *Int J Spine Surg*. 2023 Aug 10;8525. <https://dx.doi.org/10.14444/8525>.
 150. **Personalized Medicine in Cancer Pain Management.** M. Raad, W. O. C. López, A. Sharafshah, M. Assefi and K.-U. Lewandrowski. *Journal of Personalized Medicine* 2023 Vol. 13 Issue 8 Pages 1201, Accession Number: doi:10.3390/jpm13081201. <https://www.mdpi.com/2075-4426/13/8/1201>.
 151. **Surgical Technique of Central and Over-the-Top Full-Endoscopic Decompression of the Cervical Spine: A Technical Note.** J. P. M. Bergamaschi, M. B. S. d. Brito, F. F. d. Araújo, R. S. Graciano, E. T. Utino, K.-U. Lewandrowski, et al. *Journal of Personalized Medicine* 2023 Vol. 13 Issue 10 Pages 1508. Accession Number: doi:10.3390/jpm13101508. <https://www.mdpi.com/2075-4426/13/10/1508>.
 152. **Network-Based In Silico Analysis of New Combinations of Modern Drug Targets with Methotrexate for Response-Based Treatment of Rheumatoid Arthritis.** M. Assefi, K.-U. Lewandrowski, M. Lorio, R. K. A. Fiorelli, S. Landgraeber and A. Sharafshah. *Journal of Personalized Medicine* 2023 Vol. 13 Issue 11 Pages 1550. Accession Number: doi:10.3390/jpm13111550. <https://www.mdpi.com/2075-4426/13/11/1550>.
 153. **Evidence Based Clinical Analytics Supporting the Genetic Addiction Risk Severity (GARS) Assessment to Early Identify Probands in Preadiction.** Blum, K., Bowirrat, A., Thanos, P. K., Hanna, C., Khalsa, J., Baron, D., Elman, I., Badgaiyan, R. D., Dennen, C., Braverman, E. R., Carney, P., Lewandrowski, K. U., Sharafshah, A., & Gold, M. S. (2024). *EC Psychol Psychiatr*, 13(1), 1-3.
 154. **TÉCNICA DE ARTROPLASTIA TOTAL DO QUADRIL NÃO CIMENTADA NA DOENÇA DEGENERATIVA DISPLÁSICA DO QUADRIL.** Delmonte, S., Penedo J, Lewandrowski, K., Rotbande, I., Fiorelli, R. A., Mesquita, K., Giesta, C., & Ramos, M. B. (2024). 194(1), 38-51. <https://doi.org/10.52130/27639878-AANM2023v194n1p38-51>

155. **Positive Outcome of Adherence to the Reward Deficiency Syndrome Solution System Treatment Plan: A Longitudinal Study.** Gilley, E., Badgaiyan, R. D., Lewandrowski, K. U., Baron, D., Sharafshah, A., K.Thanos, P., & Blum, K. (2024). *J Addiction Psychiatry, Volume 8*(Issue 2), 158-160.
156. **A historical perspective on clonidine as an alpha-2A receptor agonist in the treatment of addictive behaviors: Focus on opioid dependence.** Gold, M. S., Blum, K., Bowirrat, A., Pinhasov, A., Bagchi, D., Dennen, C. A., Thanos, P. K., Hanna, C., Lewandrowski, K.-U., Sharafshah, A., Elman, I., & Badgaiyan, R. D. (2024). *ITPS, 0*(0). <https://doi.org/10.36922/itps.1918>
157. **A historical perspective on clonidine as an alpha-2A receptor agonist in the treatment of addictive behaviors: Focus on opioid dependence.** Gold, M. S., Blum, K., Bowirrat, A., Pinhasov, A., Bagchi, D., Dennen, C. A., Thanos, P. K., Hanna, C., Lewandrowski, K. U., Sharafshah, A., Elman, I., & Badgaiyan, R. D. (2024). *INNOSC Theranostics Pharmacol Sci, 7*(3). <https://doi.org/10.36922/itps.1918>
158. **Clinical and Radiographic Outcomes of Cervical Disc Replacement Versus Posterior Endoscopic Cervical Decompression: A Matched-Pair Comparison Analysis.** Kotheeranurak, V., Jitpakdee, K., Lewandrowski, K. U., Lin, G. X., Singhatanadgige, W., Limthongkul, W., Yingsakmongkol, W., Kim, J. S., & Liawrungrueang, W. (2024). *Neurospine, 21*(3), 1040-1050. <https://doi.org/10.14245/ns.2448582.291>
159. **Disability-adjusted life years from bone and joint infections associated with antimicrobial resistance: an insight from the 2019 Global Burden of Disease Study.** Lewandrowski, K.-U., da Silva, R. C. L., Elfar, J. C., Alhammoud, A., Moghamis, I. S., Burkhardt, B. W., Oertel, J. M., Landgraeber, S., Fiorelli, R. K. A., & de Carvalho, P. S. T. (2024). *International Orthopaedics, 1*-12.
160. **Advancements in Custom 3D-Printed Titanium Interbody Spinal Fusion Cages and Their Relevance in Personalized Spine Care.** Lewandrowski, K.-U., Vira, S., Elfar, J. C., & Lorio, M. P. (2024). *Journal of Personalized Medicine, 14*(8), 809. <https://www.mdpi.com/2075-4426/14/8/809>
161. **Comparative Analysis of Learning Curve, Complexity, Psychological Stress, and Work Relative Value Units for CPT 62380 Endoscopic Lumbar Spinal Decompression vs Traditional Lumbar Spine Surgeries: A Paired Rasch Survey Study.** Lewandrowski, K. U., Alfaro Pachicano, H. H., Alvim Fiorelli, R. K., Elfar, J. C., Landgraeber, S., Oertel, J., Hellinger, S., Dowling, Á., De Carvalho, P. S. T., Ramos, M. R. F., Defino, H., Bergamaschi, J. P., Houle, P., Montemurro, N., Yeung, C., Brito, M., Beall, D. P., Ivanic, G., Xifeng, Z., . . . Lorio, M. P. (2024). *Int J Spine Surg, 18*(2), 138-151. <https://doi.org/10.14444/8594>
162. **Surgeon Perceptions of Performing Transforaminal Lumbar Interbody Fusion in an Ambulatory Surgical Center vs Hospital Setting in the Elderly Population: Results of a Surgeon Survey.** Lewandrowski, K. U., Alhammoud, A., Schlesinger, S. M., Gelber, B. R., Gerber, M. B., & Lorio, M. (2024). *Int J Spine Surg, 18* (2), 199-206. <https://doi.org/10.14444/8596>
163. **Polytomous Rasch Analyses of Surgeons' Decision-Making on Choice of Procedure in Endoscopic Lumbar Spinal Stenosis Decompression Surgeries.** Lewandrowski, K. U., Alvim Fiorelli, R. K., Pereira, M. G., Abraham, I., Alfaro Pachicano, H. H., Elfar, J. C., Alhammoud, A., Landgraeber, S., Oertel, J., Hellinger, S., Dowling, Á., De Carvalho, P. S. T., Ramos, M. R. F., Defino, H., Bergamaschi, J. P., Montemurro, N., Yeung, C., Brito, M., Beall, D. P., Lorio, M. P. (2024). *Int J Spine Surg, 18*(2), 164-177. <https://doi.org/10.14444/8595>
164. **Insights From the ISASS Webinar Series on Current and Emerging Techniques in Endoscopic Spine Surgery | Part 1: Polytomous Rasch Analysis of Surgeon Endorsement of Endoscopic Discectomy/Foraminotomy, Interbody Fusion, and Importance of Patient Feedback During Surgery.** Lewandrowski, K. U., Terxeira de Carvalho, P. S., Dowling, A., Li, Z. Z., Knight, M., & Lorio, M. P. (2024). *Int J Spine Surg.* <https://doi.org/10.14444/8672>
165. **Key Takeaways From the ISASS Webinar Series on Current and Emerging Techniques in Endoscopic Spine Surgery | Part 2: Polytomous Rasch Analysis of Learning Curve and Surgeon Endorsement of Biportal, Interlaminar, and**

- Transforaminal Endoscopic Stenosis Decompression, Discectomy, and Laminectomy in Combination With Interspinous Process Spacers. Lewandrowski, K. U., Basil, G. W., Kwon, B., Liu, X., Alonso Cuéllar, G. O., de Carvalho, P. S. T., & Lorio, M. P. (2024). *Int J Spine Surg.* <https://doi.org/10.14444/8673>
166. Insights From ISASS Webinar Series on Current and Emerging Techniques in Endoscopic Spine Surgery | Part 3: A Polytomous Rasch Analysis on Surgeons' Endorsement of Multiportal Access, Treatment of Lumbar Facet Cyst, Grade I Spondylolisthesis, and Interbody Fusion. Lewandrowski, K. U., Kim, C., Kwon, B., Ongulade, J., Ito, K., Terxeira de Carvalho, P. S., & Lorio, M. P. (2024). *Int J Spine Surg.* <https://doi.org/10.14444/8674>
 167. Webinar Series on Endoscopic Spine Surgery Techniques Part 4: Advancing the Curve on Surgeons' Experience With Complex Lumbar Revision Scenarios, Grades 1 to 3 Spondylolytic Spondylolisthesis, Cervical Foraminotomy, and Cervical Spondylotic Myelopathy. Lewandrowski, K. U., Morgenstern, C., Knight, M., Jiang, Y., Xifeng, Z., Terxeira de Carvalho, P. S., & Lorio, M. P. (2024). Key Takeaways From ISASS *Int J Spine Surg.* <https://doi.org/10.14444/8675>
 168. Insights on High-Value Procedures From the ISASS 4-Part Webinar Series on Current and Emerging Techniques in Endoscopic Spine Surgery Based on Surgeon Experience. Lewandrowski, K. U., Li, Z. Z., Liu, X., Xifeng, Z., Kwon, B., Dowling, Á., Knight, M., Terxeira de Carvalho, P. S., Kim, C., Basil, G. W., Alonso Cuéllar, G. O., Morgenstern, C., Ongulade, J., Jiang, Y., Ito, K., Bergamaschi, J. P., Kim, J. L., Ramirez, J. F., Oertel, J., . . . Lorio, M. P. (2024). *Int J Spine Surg.*
 169. Editors' Introduction: High-Value Endoscopic Techniques: Integrating Surgeon Skill and Experience in Spine Surgery With Rasch Analysis. Lewandrowski, K. U., & Lorio, M. P. (2024). *Int J Spine Surg.* <https://doi.org/10.14444/8670>
 170. Disability-adjusted life years from bone and joint infections associated with antimicrobial resistance: an insight from the 2019 Global Burden of Disease Study. Lewandrowski, K. U., da Silva, R. C. L., Elfar, J. C., Alhammoud, A., Moghamis, I. S., Burkhardt, B. W., Oertel, J. M., Landgraeber, S., Fiorelli, R. K. A., de Carvalho, P. S. T., Abraham, I., León, J. F. R., Martinez, E., & Lorio, M. P. (2024). *Int Orthop.* <https://doi.org/10.1007/s00264-024-06143-2>
 171. A Pharmacogenomics-Based In Silico Investigation of Opioid Prescribing in Post-operative Spine Pain Management and Personalized Therapy. Lewandrowski, K. U., Sharafshah, A., Elfar, J., Schmidt, S. L., Blum, K., & Wetzel, F. T. (2024). *Cell Mol Neurobiol*, 44(1), 47. <https://doi.org/10.1007/s10571-024-01466-5>
 172. Assessing the Impact of IL-6 and Serotonin on Pain and Symptomatology in Fibromyalgia: An Exploratory Clinical Study. Loçasso, F. A., Filho, H. A., Alvarenga, R. M. P., Schimidt, S. L., Fiorelli, F. K., Ramos, P. d. S., Leidersnaider, S. C. L., Blum, K., Lewandrowski, K.-U., Cunha-Junior, E. F., & Fiorelli, R. K. A. (2024). *Journal of Personalized Medicine*, 14(8), 886. <https://www.mdpi.com/2075-4426/14/8/886>
 173. Paired Comparison Survey Analysis Utilizing Rasch Methodology of the Relative Difficulty and Estimated Work Relative Value Units of CPT Code 0202T. Lorio, M., Lewandrowski, K. U., Yeager, M. T., Hallas, K., Kube, R., & Yue, J. (2024). *Int J Spine Surg.* <https://doi.org/10.14444/8587>
 174. Top Three Healthcare Trends in Orthopaedics Affecting Musculoskeletal Care in the Elderly. Lorio, M. P., Lewandrowski, K. U., & Blum, K. (2024). *Curr Aging Sci.* <https://doi.org/10.2174/0118746098309054240721180720>
 175. Clinical Implementation of Tissue-Sparing Posterior Cervical Fusion: Addressing Market Access Challenges. Lorio, M. P., Nunley, P. D., Heller, J. E., McCormack, B. M., Lewandrowski, K.-U., & Block, J. E. (2024). *Journal of Personalized Medicine*, 14(8), 837. <https://www.mdpi.com/2075-4426/14/8/837>
 176. Utilization of Bone-Anchored Annular Defect Closure to Prevent Reherniation Following Lumbar Discectomy: Overcoming Barriers to Clinical Adoption and Market Access. Lorio, M. P., Watters, W. C., Grunch, B. H., Metzger, A. K., Lewandrowski, K. U., Block, J. E., & Andersson, G. B. J. (2024). *Int J Spine Surg.* <https://doi.org/10.14444/8592>
 177. Is There a Natural, Non-Addictive, And Non-Anti-Reward, Safe, Open Access Gene-Based Solution to Treat Reward Deficiency Syndrome (RDS)? KB220 Variants Vs. GLP-1 Analogs. Modestino, E., Bowirrat, A., Baron, D.,

- Thanos, P., Hanna, C., Bagchi, D., Braverman, E., Dennen, A. C., Badgaiyan, R., Pollack, A. P., Lewandrowski, K., Sharafshah, A., Gold, M., & Blum, K. (2024). *Journal of Addiction Psychiatry*, 8(1), 35-49.
178. **Is There a Natural, Non-addictive, and Non-anti-reward, Safe, Gene-based Solution to Treat Reward Deficiency Syndrome? KB220 Variants vs GLP-1 Analogs.** Modestino, E. J., Bowirrat, A., Baron, D., Thanos, P. K., Hanna, C., Bagchi, D., Braverman, E. R., Dennen, C. A., Badgaiyan, R. D., Pollack, A. R., Lewandrowski, K. U., Sharafshah, A., Gold, M. S., & Blum, K. (2024). *J Addict Psychiatry*, 8(1), 34-49.
 179. **Hemiplegic Migraines Exacerbated using an Injectable GLP-1 Agonist for Weight Loss.** Modestino, E. J., Bowirrat, A., Lewandrowski, K. U., Sharafshah, A., Badgaiyan, R. D., Thanos, P. K., Baron, D., Dennen, C. A., Elman, I., Sunder, K., Murphy, K. T., & Blum, K. (2024). *Acta Sci Neurol*, 7(5), 12-18. <https://doi.org/10.31080/asne.2024.07.0731>
 180. **Selenoprotein P in a Rodent Model of Exercise; Theorizing Its Interaction with Brain Reward Dysregulation, Addictive Behavior, and Aging.** Mohr, P., Hanna, C., Powell, A., Penman, S., Blum, K., Sharafshah, A., Lewandrowski, K.-U., Badgaiyan, R. D., Bowirrat, A., Pinhasov, A., & Thanos, P. K. (2024). *Journal of Personalized Medicine*, 14(5), 489. <https://www.mdpi.com/2075-4426/14/5/489>
 181. **A Novel Mutation (Lys31Arg) in the DMD Gene Impacts on Neuromuscular Dysfunctions found by Whole Exome Sequencing and In Silico Analyses in an Iranian Family.** Omarmeli, V., Lewandrowski, K. U., Assefi, M., Faizmahdavi, H., Sharafshah, A., & Mansouri, N. (2024). *Curr Aging Sci*. <https://doi.org/10.2174/01187460982804082401121121414>
 182. **Gastric Cancer - Just One Bite: Is it Enough? Comparing the Use of Seven Biopsies with that of Only One Endoscopic Biopsy to Diagnose Advanced Gastric Cancer.** Pelosi, A. D., Luna, P. A., Mello, G. F. d. S., Oliveira, I. M. d., Ferreira, M. A., Thuler, L. C. S., Lewandrowski, K.-U., & Fiorelli, R. K. A. (2024). *Current Surgical Endoscopy*, 1(1).
 183. **EPIC Technique Spinal Procedure Improves Ocular Motion and Dizziness by Resolving Cranial Nerve VI Palsy.** Pierce, S., Blum, K., Lewandrowski, K., Elman, I., Zelinsky, D., Sharafshah, A., Pollack, A. R., & Badgaiyan, D. R. (2024). *ACTA SCIENTIFIC NEUROLOGY*, 7(7), 03-10. <https://doi.org/DOI: 10.31080/ASNE.2024.07.0747>
 184. **Sustained Attention Can Be Measured Using a Brief Computerized Attention Task.** Schmidt, J., da Silva Senges, G., Gonçalves Fernandes Campos, R., Lucieri Alonso Costa, G., Eliza Moreira Boechat, Y., da Cunha Barbosa Leite, J., Santos Portela, A., Lewandrowski, K. U., de Corrêa BorgesLacerda, G., Schmidt, G., & Schmidt, S. (2024). *Sci Rep*, 14(1), 17001. <https://doi.org/10.1038/s41598-024-68093-4>
 185. **New Perspectives on Risk Assessment and Anticoagulation in Elective Spine Surgery Patients: The Impact of Ultra-Minimally Invasive Endoscopic Surgery Techniques on Patients with Cardiac Disease.** Siciliano, A., Lewandrowski, K. U., Schmidt, S. L., Alvim Fiorelli, R. K., de Carvalho, P. S. T., Alhammoud, A., Alvim Fiorelli, S. K., Marques, M. A., & Lorio, M. P. (2024). *J Pers Med*, 14(7). <https://doi.org/10.3390/jpm14070761>
 186. **Neuroinflammatory Approach to Surgical Trauma: Biomarkers and Mechanisms of Immune and Neuroendocrine Responses.** Silva, G. N., Brandão, V. G. A., Perez, M. V., Blum, K., Lewandrowski, K.-U., & Fiorelli, R. K. A. (2024). *Journal of Personalized Medicine*, 14(8), 829. <https://www.mdpi.com/2075-4426/14/8/829>
 187. **Solving the Global Opioid Crisis: Incorporating Genetic Addiction Risk Assessment with Personalized Dopaminergic Homeostatic Therapy and Awareness Integration Therapy.** Zeine, F., Jafari, N., Baron, D., Bowirrat, A., Pinhasov, A., Norling, B., Carter-Martinez, K., Nami, M., Manavi, N., Sunder, K., Rabin, D., Bagchi, D., Gold, M., Sipple, D., Barzegar, M., Bodhanapati, J., Khader, W., Carney, P., Dennen, A. C., Blum, K. (2024). 8(1), 50-95.
 188. **Time to Admit Genes and Epigenetics are Indeed the Blueprint for a Rewardful Life Whereby the Organism Controls the Genome.** Blum, K., Braverman, E. R., Lewandowski, K. U., Gold, M. S., Gardner, E. L., Elman, I., Berman, M. O., Cadet, J. L., Sharafshah, A., Dennen, C. A., Bowirrat, A., Pinhasov, A., Baron, D., Levin, C., Gondre-Lewis, M., Badgaiyan, R. D., Khalsa, J., Sunder, K., Murphy, K. T., . . . Thanos, P. K. (2025). *ACTA SCIENTIFIC NEUROLOGY*, 8(1), 3-9. <https://doi.org/DOI: 10.31080/ASNE.2024.08.0794>
 189. **Theorizing That Psychedelic Assisted Therapy May Play a Role in the Treatment of Trauma-Induced Personality Disorders.** Martire, Gianni, Daniel Sipple, David Baron, Mark S Gold, Kai-Uwe Lewandowski, Catherine A Dennen, Alireza Sharafshah, Igor Elman, Panayotis K Thanos, and Edward J Modestino. *Journal of Addiction Psychiatry* 8, no. 2 (2024): 161.

190. **The First Pilot Epigenetic Type Improvement of Neuropsychiatric Symptoms in a Polymorphic Dopamine D2 (-Drd2/Ankk (Taq1a)), Oprm1 (a/G), Drd3 (C/T), and Maoa (4r) Compromised Preadolescence Male with Putative Pandalas/Cans: Positive Clinical Outcome with Precision-Guided DNA Testing and Pro-Dopamine Regulation (Kb220) and Antibacterial Therapies.** Blum, K., I. Elman, D. Han, C. Hanna, D. Baron, A. Gupta, S. Kazmi, J. Khalsa, D. Bagchi, T. McLaughlin, R. D. Badgaiyan, E. J. Modestino, D. Edwards, C. A. Dennen, E. R. Braverman, A. Bowirrat, K. Sunder, K. Murphy, N. Jafari, F. Zeine, P. R. Carney, M. S. Gold, K. U. Lewandowski, A. Sharafshah, A. R. Pollack, and P. K. Thanos. *Open J Immunol* 14, no. 3 (Sep 2024): 60-86. <https://dx.doi.org/10.4236/oji.2024.143006>.
191. **Hypothesizing Enhanced Brain Activity as a Function of Dopamine Homeostasis as Observed with Kb220 in a Male Delayed Cognitive Performance.** Cronje, Frans J, Ronald Swatzyna, Igor Elman, Panayotis K Thanos, Kai-Uwe Lewandowski, Alireza Sharafshah, Rajendra D. Badgaiyan, Aryeh R Pollack, Vaisakh S Syamala, Vivek Mathew, and Kenneth Blum. *ACTA SCIENTIFIC NEUROLOGY* 7, no. 7 (2024): 49-56. <https://dx.doi.org/10.31080/ASNE.2024.07.0756>.
192. **Narcolepsy: Like A Rolling Stone, A Disorder Without A Neurobiological Home...In Need Of Answers.** Modestino, E. J., Sharafshah, A., Lewandowski, K. U., Baron, D., Thanos, K. P., Lewandowski, A. P., Badgaiyan, D. R., Dennen, A. C., & Blum, K. (2025). *World Journal of Pharmaceutical Science and Research*, 4(1), 44-47. <https://doi.org/10.5281/zenodo.14783720>
193. **Response to the SAMHSA Clinical Advisory: Considerations for Genetic Testing in the Assessment of Substance Use Disorder Risk.** Green, R. P., Blum, K., Lewandowski, K. U., Gold, M. S., Lewandowski, A. P. L., Thanos, P. K., Dennen, C. A., Baron, D., Elman, I., Sharafshah, A., Modestino, E. J., & Badgaiyan, R. D. (2025). *Subst Abuse Rehabil*, 16, 23-26. <https://doi.org/10.2147/sar.S514931>
194. **Endoscopic transfacet Decompression for Severe Lumbar Spinal Stenosis: A Technical Note, Illustrative Clinical Series, and Surgeon Survey Regarding Post-Decompression Instability.** Lewandowski, K.-U., Dowling, Á., Kim, C., Kwon, B., Ongulade, J., Ito, K., de Carvalho, P. S. T., & Lorio, M. P. (2025). *Journal of Personalized Medicine*, 15(2), 53. <https://www.mdpi.com/2075-4426/15/2/53>
195. **A Challenging Cornerstone of the Purpose and Meaning of Life Via Reward and Role in Neurology and Addiction.** Braverman, Eric R, Milan Makale, Ashim Gupta, Ben Graham, A. Kenison Roy, Jag Khalsa, David E Smith, Thomas McLaughlin, David Baron, Anish Bajaj, Debasis Bagchi, Joseph P Morgan, Raju Hajela, Catherine Dennen, Serge Martich-Osterman, Rajendra D. Badgaiyan, Ishan Sharma, Abdalla Bowirrat, Albert Pinhasov, Panyotis K Thanos, Keerthy Sunder, Kevin T Murphy, Miles R. Makale, Edward J Modestino, Nichole Pappas, John Giordano, Stephen Boyarsky, Alia Torres, Aryeh Pollack, Rossano Kepler Alvim Fiorelli, Sergio Schmidt, Alireza Sharafshah, Kai -Uwe Lewandowski, Igor Elman, Chynna Fliegelman, Alex P Lewandowski, and Kenneth Blum. *USG Proceedings Journal* 1, No. 1 (2025): 1-11.
196. **Coupling Bio-Resonance Neurotechnology (Brnt) and Dual Hemispheric Repetitive Transcranial Magnetic Stimulation (Rtms) Reduces Comorbid Major Depressive Disorder (Mdd) and Generalized Anxiety Disorder (Gad) as Demonstrated by Phq-9 and Gad-7: Pilot Case Series.** Sunder, K., M. T. Makale, M. Makale, J. Bodhanapati, K. T. Murphy, C. A. Dennen, D. Baron, P. K. Thanos, C. Hanna, J. W. Ashford, K. U. Lewandowski, and K. Blum. *Psychol Res Behav Manag* 18 (2025): 225-40. <https://dx.doi.org/10.2147/prbm.S482960>.
197. **Neurospirituality Connectome-Role in Neurology and Reward Deficiency Syndrome (RDS).** Blum K, Braverman ER, Makale M, Zeine F, Roy AK, Khalsa J, Smith DE, Baron D, Jafar N, Bagchi D, Dennen CA, Bowirrat A, Pinhasov A, Thanos PK, Sunder K, Murphy KT, Makale MR, Modestino EJ, Lewandowski K-U, Sharafshah A, Elman I, Pollack A, Levin C, Fiorelli RKA, Schmidt S, Lewandowski AP, Mahajan S, Gastelu D, Martire G, Badgaiyan RD, Morgan J. *EC Neurology* 2025;17(2):01-25. [PMCID12742807](https://doi.org/10.20935/AcadMed7535)
198. **Effects of Chronic Treadmill Exercise on Testosterone Levels in Males and Females.** Perreault, Brendan, Samantha Penman, Nikki Hammond, Kenneth Blum, Kai Uwe Lewandowski, Rajendra D. Badgaiyan, Mark S. Gold, David Baron, and Panayotis K. Thanos. *Academia Medicine* 2, Brief Research Report (2025-02-20 2025): 1-5. <https://dx.doi.org/https://doi.org/10.20935/AcadMed7535>.
199. **A Multidisciplinary Exploration of Self-Identity Development: Applying Awareness Integration Theory in Psychopathology and Genetic Research.** Zeine, Foojan, Nicole Jafar, Eileen Manoukian, Hila Madani, Kai -Uwe Lewandowski, Alireza Sharafshah, Rajendra D Badgaiyan, David Baron, Abdalla Bowirrat, and Kenneth Blum.

- Review Article, *Medical Research Archives* 13, no. 3, The European Society of Medicine (2025): 1-22. <https://dx.doi.org/https://doi.org/10.18103/mra.v13i3.6294>.
200. **Complex Nadase Infusions Improve Clinical Outcome in Substance Use Disorder: Descriptive Annotation in Fifty Cases.** Blum, K., T. McLaughlin, K. U. Lewandrowski, A. Sharafshah, C. Dennen, P. K. Thanos, D. Baron, E. J. Modestino, K. Sunder, K. T. Murphy, M. Makle, E. Giley, E. R. Braverman, J. Giordano, and R. D. Badgaiyan. *J Addict Psychiatry* 8, no. 1 (Aug 23 2024): 95-157.
 201. **Comparative Perioperative Narcotic Use in Tlif Patients: Spinal Versus General Anesthesia in a Retrospective Cohort Study of 180 Cases in Hospital and Ambulatory Settings.** Gold, C., K. U. Lewandrowski, H. Spears, and E. E. Braxton. *Clin Neurol Neurosurg* 251 (Mar 12 2025): 108840. <https://dx.doi.org/10.1016/j.clineuro.2025.108840>.
 202. **Theorizing the Role of Gama Type Endorphins in Schizophrenia and Alcoholism: Promoting Genetic Testing and Attempts at Inducing “Dopamine Homeostasis.** Blum, Kenneth, KU Lewandowski, Alireza Sharafshah, Catherine A. Dennen, Albert Pinhasov, Abdalla Bowirrat, Chynna Fliegelman, Debasis Bagchi, Alexander PL Lewandrowski, Shaurya Mahajan, Panayotis K Thanos, and Rajendra D Badgaiyan. *Acta Scientific Neurology* 8, no. 4 (2025): 55-67.
 203. **Dopaminergic Homeostatic Therapy (DHT™) as a Putative Anti-Addiction Seeking Intervention and Early Identification of Genetic Preadiction with Genetic Addiction Risk Severity (GARS®) Screening.** Lewandrowski, Kai-Uwe, Abdalla Bowirrat, Albert Pinhasov, Alireza Sharafshah, Mark S Gold, Brian Fuehrlein, Igor Elman, Catherine Dennen, Panayotis K. Thanos, Colin Hanna, Daniel Sipple, David Baron, Gianni Martire, Edward J Modestino, Nicole Jafari, Foojan Zeine, Keerthy Sunder, Alexander PL Lewandrowski, Rajendra D Badgaiyan, Jag Khalsa, Aryeh Pollack, Rossano Kepler Alvim Fiorelli, Sergio Schmidt, Chynna Fliegelman, Morgan P Lorio, Milan T Makale, and Kenneth Blum. *Acta Sci Neurol* 8, no. 5 (2025): 70-88. <https://www.actascientific.com/ASNE/ASNE-08-0828.php>
 204. **Exploring Dopamine as the Master Regulator of Brain Circuitry and Mental Health Genome.** Blum, Kenneth, Eric R. Braverman, Alireza Sharafshah, Igor Elman, Kai-Uwe Lewandrowski, Abdalla Bowirrat, Albert Pinhasov, Panayotis K. Thanos, Mark S. Gold, Catherine A. Dennen, Edward J. Modestino, Rajendra D. Badgaiyan, David Baron, Brian Fuehrlein, Daniel Sipple, John Wesson Ashford, Keerthy Sunder, Milan Makale, Kevin Murphy, Nicole Jafari, Foojan Zeine, Aryeh R. Pollack, Paul A.L. Lewandowski, and Jag Khalsa. *GPD* (2025). <https://dx.doi.org/10.36922/gpd.6557>.
 205. **Would It Be Medically Smart to Offer Glp1 Agonists to Patients Instead of Bariatric Surgery: Looking into the Mirror for Evidence?** Blum, Kenneth, Panayotis K Thanos, Kai Uwe Lewandrowski, Albert Pinhasov, Morgan P Lorio, Alireza Sharafshah, Edward J Modestino, Mark S Gold, Alexander PL Lewandrowski, Kavya Mohankumar, Abdalla Bowirrat, Debasis Bagchi, and Rajendra D Badgaiyan. Review Article, *ACTA SCIENTIFIC NEUROLOGY* 8, no. 6 (2025): 22-32.
 206. **A New Chapter for the International Journal of Spine Surgery: Global Perspective, Rapid Publishing, and Author-Centered Innovation.** Harrop, J. S., K. U. Lewandrowski, O. L. Alves, A. E. Telfeian, and I. L. Moss. *Int J Spine Surg* 19, no. 2 (May 12 2025): 129-30. <https://dx.doi.org/10.14444/8758>.
 207. **High-Value Procedures in Endoscopic Spine Surgery: An Analysis of Clinical Outcomes Based on Surgeon Experience, Skill, and Training.** Lewandrowski, K. U., M. P. Lorio, B. W. Burkhardt, and A. R. Vaccaro. *Int J Spine Surg* (Jun 4 2025). <https://dx.doi.org/10.14444/8705>.
 208. **Cocaine Self-Administration Attenuates Brain Glucose Metabolism and Functional Connectivity in Rats.** Rowan, C., C. Hanna, M. Sajjad, R. Yao, A. Sharafsha, K. U. Lewandrowski, K. Blum, A. Pinhasov, and P. K. Thanos. *PLoS One* 20, no. 6 (2025): e0324522. <https://dx.doi.org/10.1371/journal.pone.0324522>.
 209. **Exercise Leads to Brain Glucose Metabolism Activation, Increased Dopamine D1 Receptor Levels and Is Negatively Correlated with Social Behavior.** Bobick, Michael, Colin Hanna, John Tyler, Patrick Mohr, Huy Lu, Kenneth Blum, David Baron, Kai-Uwe Lewandrowski, Igor Elman, Albert Pinhasov, Mark S. Gold, and Panayotis K. Thanos. *Journal of Integrative Neuroscience* 24, no. 6 (2025). <https://dx.doi.org/https://doi.org/10.31083/JIN36646>.

210. **Patient Perspectives on Awake Transforaminal Endoscopic Decompression Surgery Outcomes.** Telfeian, Albert E., Rohaid Ali, Sanjay Konakondla, and Kai-Uwe Lewandrowski. *International Journal of Spine Surgery* (2025): 8763. <https://dx.doi.org/10.14444/8763>.
211. **Pre-Addiction Phenotype Is Associated with Dopaminergic Dysfunction: Evidence from 88.8 Million Genome-Wide Association Study-Based Samples.** Blum, Kenneth, Alireza Sharafshah, Kai-Uwe Lewandrowski, Sérgio Luís Schmidt, Rossano Kepler Alvim Fiorelli, Albert Pinhasov, Abdalla Bowirrat, Mark S. Gold, Eliot L. Gardner, Panayotis K. Thanos, Brian Fuehrlein, David Baron, Igor Elman, Catherine A. Dennen, Nicole Jafari, Foojan Zeine, Alexander P.L. Lewandrowski, Milan Makale, Edward J. Modestino, Keerthy Sunder, Kevin T. Murphy, Chynna Fliegelman, Shaurya Mahajan, Yatharth Mahajan, and Rajendra D. Badgaiyan. *GPD* (2025). <https://dx.doi.org/10.36922/gpd.8090>.
212. **Exercise Leads to Brain Glucose Metabolism Activation, Increased Dopamine D1 Receptor Levels and Is Negatively Correlated with Social Behavior.** Bobick, M., C. Hanna, J. Tyler, P. Mohr, H. Lu, A. Powell, K. Blum, D. Baron, K. U. Lewandrowski, I. Elman, A. Pinhasov, M. S. Gold, and P. K. Thanos. *J Integr Neurosci* 24, no. 6 (Jun 6 2025): 36646. <https://dx.doi.org/10.31083/jin36646>.
213. **Criterion Validity of the Genetic Addiction Risk Severity (Gars) as a Marker of Reward Deficiency in Polydrug Addiction: A Multi-Center Study.** Blum, Kenneth, Brett C. Haberstick, Andrew Smolen, David Han, Igor Elman, Catherine A. Dennen, Marlene Oscar-Berman, David E. Smith, Thomas Simpatico, John Giordano, Eric R. Braverman, Mary Hauser, Stephen Butler, Alphonse Kennison Roy III, Panayotis K Thanos, Daryl Inaba, Lyle Fried, Mauro Ceccanti, Foojan Zeine, Nicole Jafari, Keerthy Sunder, Abdalla Bowirrat, Albert Pinhasov, Kai-Uwe Lewandrowski, Alireza Sharafshah, Kevin T. Murphy, Milan Makale, Jag Khalsa, David D. Baron, Rajendra Badgaiyan, Edward J. Modestino, Elizabeth Gilley, Thomas McLaughlin, and Mark S. Gold. *J Transl Genet Genom* 9 (2025). <https://dx.doi.org/10.20517/jtgg.2024.56>.
214. **Demographic Shifts and Disease Burden in Brazil: Analyzing Future Healthcare Trends and Expenditure Needs.** Fiorelli, R. K. A., K. U. Lewandrowski, A. Siciliano, S. L. Schmidt, P. S. T. de Carvalho, S. K. A. Fiorelli, M. A. Marques, and S. L. Sobrinho. *Curr Aging Sci* (Jul 31 2025). <https://dx.doi.org/10.2174/0118746098371434250728051423>.
215. **A Gwas Meta-Meta-Analysis and In-Depth Silico Pharmacogenomic Investigations in Identification of Apoe and Other Genes Associated with Pain, Anti-Inflammatory, and Immunomodulating Agents in Opioid Use Disorder (Oud) Derived from 14.91 M Subjects.** Sharafshah, A., M. Motovali-Bashi, K. Blum, K. U. Lewandrowski, M. S. Gold, P. Keshavarz, and P. K. Thanos. *Cell Mol Neurobiol* 45, no. 1 (Jul 31 2025): 76. <https://dx.doi.org/10.1007/s10571-025-01587-5>.
216. **Theorizing the Role of Gama Type Endorphins in Schizophrenia and Alcoholism: Promoting Genetic Testing and Attempts at Inducing “Dopamine Homeostasis”.** Blum, Kenneth, KU Lewandowski, Alireza Sharafshah, Catherine A. Dennen, Albert Pinhasov, Abdalla Bowirrat, Chynna Fliegelman, Debasis Bagchi, Alexander PL Lewandrowski, Shaurya Mahajan, Panayotis K Thanos, and Rajendra D Badgaiyan. *ACTA SCIENTIFIC NEUROLOGY* 8, no. 4 (2025): 55-67.
217. **EEG-Spectra-Guided Personalized rTMS in PTSD with Co-Occurring Psychiatric Disorders: A Case Series.** Mohankumar, K., S. Karthikeya, S. Mahajan, J. Bodhanapati, C. Vigilia, M. Odrón, K. Blum, D. Baron, K. U. Lewandrowski, R. D. Badgaiyan, E. J. Modestino, and K. Sunder. *Acta Sci Neurol* 8, no. 2 (Jan 24 2025): 3-9.
218. **Dopaminergic Homeostatic Therapy (DHT™) as a Putative Anti-Addiction Seeking Intervention and Early Identification of Genetic Preadiction with Genetic Addiction Risk Severity (Gars®) Screening.** Lewandrowski, Kai-Uwe, Abdalla Bowirrat, Albert Pinhasov, Alireza Sharafshah, Mark S Gold, Brian Fuehrlein, Igor Elman, Catherine Dennen, Panayotis K Thanos, Colin Hanna, Daniel Sipple, David Baron, Gianni Martire, Edward J Modestino, Nicole Jafari, Foojan Zeine, Keerthy Sunder, Alexander PL Lewandrowski, Rajendra D Badgaiyan, Jag Khalsa, Aryeh Pollack, Rossano Kepler Alvim Fiorelli, Sergio Schmidt, Chynna Fliegelman, Morgan P Lorio, Milan T Makale, and Kenneth Blum. *Acta Sci Neurol*. 8, no. 5 (2025): 70–88.
219. **Precision Genomics: A Reality Having Universal Impact in a New Era of Psychiatry – Lessons Learned, Past and Present.** Blum, Kenneth, Alireza Sharafshah, Jag Khalsa, Kai Uwe-Lewandrowski, Kavya Mohankumar, Panayotis K Thanos, Albert Pinhasov, David Baron, Catherine A. Dennen, Joseph J Morgan, Marco Lindenau, Igor Elman, Eliot L. Gardner, Mark S. Gold, Edward J. Modestino, Brian Fuehrlein, Paul R. Carney, Rene Cortese, Abdalla Bowirrat, Margaret A. Madigan, Keerthy Sunder, Morgan P Lorio, Foojan Zeine, Nicole Jafari, Milan T. Makale,

- Debasis Bagchi, Mauro Ceccanti, Rossano K A Fiorelli, Sérgio Luís Schmidt, Daniel Sipple, Alexander P. L. Lewandrowski, Gianni Matare, Shaurya Mahajan, Yatharth Mahajan, Colin Hanna, Daniel Gastelu, Anand Swaroop, Chynna Fliegelman, and Rajendra D. Badgaiyan. *Journal of Addiction Psychiatry* 9, no. 1 (2025): 8-13. <https://doi.org/10.17756/jap.2025-050>.
220. **Benefits of Incorporating Candidate Genetic Screening for Pre-Addiction Vulnerability in the Face of the Opioid Crisis: An Opportunity for Addiction Psychiatry.** Mohankumar, Kavya, Kenneth Blum, Abdalla Bowirrat, Albert Pinhasov, Kyriaki Z Thanos, Panayotis K Thanos, Igor Elman, Alireza Sharafshah, Kai-Uwe Lewandrowski, Paul R Carney, David Baron, Catherine A Dennen, Brian Fuehrlein, Milan Makale, Keerthy Sunder, Foojan Zeine, Nicole Jafari, Edward J Modestino, Mark S Gold, and Rajendra D Badgaiyan. *ACTA SCIENTIFIC NEUROLOGY* 8 September, no. 9 (2025): 21-40.
 221. **Targeting Pro-Dopaminergic Agonism to Attenuate and Depression in Patient's Displaying Genetic/Epigenetic Predisposition to Hypodopaminergia.** Lewandrowski, Kai-Uwe, Kenneth Blum, Alexander P. L. Lewandrowski, Panayotis K. Thanos, Albert Pinhasov, Alireza Sharafshah, David Baron, Mark S. Gold, Catherine A. Dennen, Igor Elman, Aballa Bowirrat, Edward J. Modestino, Foojan Zeine, Nicole Jafari, Keerthy Sunder, Milan T. Makale, John Giordano, Marjorie C. Gondre-Lewis, Marco Lindenau, Brian S. Fuehrlein, Rajendra D. Badgaiyan, Chynna Levin, Sergio Luis Schmidt, and Rossano Kepler Alvim Fiorelli. *Opinion, Frontiers in Public Health* Volume 13 - 2025 (2025-September-25 2025). <https://dx.doi.org/10.3389/fpubh.2025.1594872>.
 222. **Ketamine's Role in Neuroinflammation and Neuroprotection across Neurological and Psychiatric Disorders: A Narrative Review.** Silva, Gustavo N., Virna G. A. BrandVêo, Kenneth Blum, Kai-Uwe Lewandrowski, and Rossano K. A. Fiorelli. *Pharmaceuticals* 18, no. 9 (2025): 1298. <https://www.mdpi.com/1424-8247/18/9/1298>.
 223. **Pgx-Based in Silico Analyses Identifies the Interactive Role of Genes, Glucose Metabolism and Dopaminergic Dysfunctional Pathways with Chronic Cocaine Use and Misuse.** Sharafshah, A., P. K. Thanos, A. Pinhasov, A. Bowirrat, C. Hanna, K. U. Lewandrowski, C. Rowan, I. Elman, M. S. Gold, C. A. Dennen, E. J. Modestino, R. D. Badgaiyan, D. Baron, B. Fuehrlein, A. Gupta, J. L. Cadet, A. R. Pollack, J. Khalsa, M. Makale, A. P. Lewandrowski, and K. Blum. *Curr Neuropharmacol* (Sep 23 2025). <https://dx.doi.org/10.2174/011570159x390146250831143523>.
 224. **Multi-Locus Pro-Dopaminergic Restoration of Reward Brain Circuitry in Reward Deficiency Rescinds Mono-Pharmaceutical Targeting.** Blum, K., K. Mohankumar, D. Bagchi, K. U. Lewandrowski, A. Sharafshah, I. Elman, M. S. Gold, C. A. Dennen, P. K. Thanos, A. Pinhasov, A. Bowirrat, A. P. Lewandrowski, D. Baron, E. J. Modestino, B. Fuehrlein, J. Khalsa, D. Gastelu, C. Fliegelman, K. Sunder, K. T. Murphy, M. Makale, M. A. Madigan, M. Lindenau, A. Swaroop, and R. D. Badgaiyan. *Neurology (ECronicon)* 17, no. 7 (Jul 2025).
 225. **Personalized Repetitive Transcranial Magnetic Stimulation (Prtrms®) Coupled with Transcranial Photobiomodulation (Tpbm) for Co-Occurring Traumatic Brain Injury (Tbi) and Post-Traumatic Stress Disorder (PTSD).** Mahajan, S., A. Bodahanapati, A. Katta, E. Aydemir, A. Mendoza, C. Vigilia, K. Blum, D. Baron, K. U. Lewandrowski, R. D. Badgaiyan, and K. Sunder. *Acta Sci Neurol* 8, no. 3 (Mar 2025): 20-27. <https://dx.doi.org/10.31080/asne.2025.08.0809>.
 226. **Exercise-Driven Modulation of Glutamatergic Signaling: Mechanisms and Clinical Implications.** Yu, Candice, John R Tyler, Igor Elman, Kenneth Blum, Kai Uwe Lewandrowski, Alireza Sharafshah, Mark S Gold, Albert Pinhasov, and Panayotis K Thanos. *Neuroscience* 598 (2025): 33-49.
 227. **Theorizing the Role of Gama Type Endorphins in Schizophrenia and Alcoholism: Promoting Genetic Testing and Attempts at Inducing "Dopamine Homeostasis.** Blum, K., K. U. Lewandowski, A. Sharafshah, C. A. Dennen, A. Pinhasov, A. Bowirrat, C. Fliegelman, D. Bagchi, A. P. Lewandrowski, S. Mahajan, P. K. Thanos, and R. D. Badgaiyan. *Acta Sci Neurol* 8, no. 4 (Apr 1 2025): 28-40. <https://dx.doi.org/10.31080/asne.2025.08.0817>.
 228. **Bringing Back Theorizing Medical Hypotheses to Spine Surgery Research in an Age of Overreliance on Randomized Controlled Trials.** Lewandrowski, K. U., M. P. Lorio, L. Alves Ó, R. K. A. Fiorelli, S. L. Schmidt, H. A. Yuan, and A. R. Vaccaro. *Int J Spine Surg* 19, no. 5 (Oct 27 2025): 555-64. <https://dx.doi.org/10.14444/8802>.
 229. **Prehabilitation Reimagined as Policy: A Multidimensional Framework to Reduce Pain, Opioid Use, and Surgical Risk.** Lewandrowski, K. U., M. P. Lorio, I. Elman, K. Blum, A. Pinhasov, P. K. Thanos, S. L. Schmidt, and R. K. A. Fiorelli. *Int J Spine Surg* (Oct 27 2025). <https://dx.doi.org/10.14444/8807>.

230. **Early Cannabis Use Poses Risks to Physical and Mental Health: Delayed Use/Non Use Encouraged.** Blum, Kenneth, Kai-Uwe Lewandrowski, Alireza Sharafshah, Kyriaki K Thanos, Abdalla Bowirrat, Albert Pinhasov, Igor Elman, Marco Lindeau, Álvaro Dowling, Rafaela Dowling, Joao Paulo Bergamaschi, Rossano Kepler Alvim Fiorelli, Sérgio Luís Schimdt, Rajendra D Badgaiyan, Morgan P Lorio, Debasis Bagchi, David Baron, Edward J Modestino, Brian Fuehrlein, Kavya Mohankumar, and Mark S Gold. Review Article, *EC Neurology* 17, no. 12 (2025): 01-08.
231. **Pharmacoeigenomics in Personalized Medicine: A Hypothesis-Generating Approach to Introduce Cpg-Pgx Snps as New Candidates for a Systematic Insight into Genomic-Epigenomic-Phenomic-Pharmacogenomics (Ge-Ph-Pgx) Axis.** Sharafshah, Alireza, Kenneth Blum, Kai-Uwe Lewandrowski, Igor Elman, Brian S Fuehrlein, David Baron, Albert Pinhasov, Panayotis K Thanos, Rossano Kepler Alvim Fiorelli, and Sergio L Schmidt. *Journal of Personalized Medicine* 15, no. 12 (2025): 579.
232. **Computational Gwas Meta Meta Analysis Revealing Cross Talk between Cannabis Cnr1 and Drd2 Receptors Optimizing Long-Term Outcomes for Cannabis Use Disorder (Cud) by Enhancing Dopamine Homeostasis Promoting High-Quality Cannabis Medicinals.** Blum, K., A. Sharafshah, J. Khalsa, K. U. Lewandrowski, P. Thanos, M. Lindenau, A. Dowling, R. Dowling, J. Bergamaschi, A. Pinhasov, D. Baron, C. A. Dennen, J. P. Morgan, I. Elman, E. L. Gardner, M. S. Gold, E. J. Modestino, B. Fuehrlein, P. R. Carney, R. Cortese, A. Bowirrat, K. Sunder, K. Mohankumar, F. Zeine, N. Jafari, M. T. Makale, D. Bagchi, M. Ceccanti, R. K. A. Fiorelli, S. L. Schmidt, D. Sipple, A. P. L. Lewandrowski, G. Matore, S. Mahajan, Y. Mahajan, C. Fliegelman, C. Hanna, and R. D. Badgaiyan. *Res Sq* (Nov 19 2025). <https://dx.doi.org/10.21203/rs.3.rs-8140327/v1>.
233. **Current Practice and Evidence for Endoscopic Spine Surgery.** Lewandrowski, K. U., J. Pittman, S. Joseph, C. Kim, C. Yeung, and A. Vaccaro. *J Am Acad Orthop Surg* (Nov 24 2025). <https://dx.doi.org/10.5435/jaaos-d-24-01424>.
234. **ISASS Recommendations and Coverage Criteria for Restorative Neurostimulation for Multifidus Dysfunction, Lumbar Region: Coverage Indications, Limitations, and/or Medical Necessity-an Isass 2025 Guideline Update.** Lorio, M. P., K. U. Lewandrowski, W. Lavelle, D. A. Essig, J. Yue, J. Ratliff, A. DiGiorgio, R. Kube, K. Radcliff, and C. I. Shaffrey. *Int J Spine Surg* (Dec 10 2025). <https://dx.doi.org/10.14444/8833>.
235. **Synergizing Digital and Print: Leveraging Spine Surgeons' Social Media to Transform Publishing and Society Interaction.** Burkhardt, B. W., K. U. Lewandrowski, C. W. Kim, M. P. Lorio, O. L. Alves, R. K. A. Fiorelli, S. L. Schmidt, H. A. Yuan, and A. R. Vaccaro. *Int J Spine Surg* 19, no. 6 (Dec 28 2025): 699-709. <https://dx.doi.org/10.14444/8836>.
236. **Regenerative and Wellness Medicine: A Boon or Barrier to Surgical Innovation in Degenerative Spine Care?** Dowling, Á, K. U. Lewandrowski, M. P. Lorio, L. Alves Ó, R. K. A. Fiorelli, S. L. Schmidt, H. A. Yuan, and A. R. Vaccaro. *Int J Spine Surg* 19, no. 6 (Dec 28 2025): 710-21. <https://dx.doi.org/10.14444/8837>.
237. **Correction:Targeting Pro-Dopaminergic Agonism to Attenuate Depression in Patients Displaying Genetic/Epigenetic Predisposition to Hypodopaminergia.** Lewandrowski, K. U., K. Blum, A. P. L. Lewandrowski, P. K. Thanos, A. Pinhasov, A. Sharafshah, D. Baron, M. S. Gold, C. A. Dennen, I. Elman, A. Bowirrat, E. J. Modestino, F. Zeine, N. Jafari, K. Sunder, M. T. Makale, J. Giordano, M. C. Gondre-Lewis, M. Lindenau, B. S. Fuehrlein, R. D. Badgaiyan, C. Levin, S. L. Schmidt, and R. K. A. Fiorelli. *Front Public Health* 13 (2025): 1737084. <https://dx.doi.org/10.3389/fpubh.2025.1737084>.
238. **Billions Spent, Few Saved: Rethinking National Institutes of Health Heal Initiative in Light of Dopaminergic Alternatives to the Opioid Trap.** Lewandrowski, K. U., K. Blum, M. P. Lorio, S. L. Schmidt, and R. K. Alvim Fiorelli. *Int J Spine Surg* 19, no. S3 (Dec 11 2025): S16-s29. <https://dx.doi.org/10.14444/8804>.
239. **Neurospirituality Connectome - Role in Neurology and Reward Deficiency Syndrome (RDS).** Blum, K., E. R. Braverman, M. Makale, F. Zeine, A. K. Roy, J. Khalsa, D. E. Smith, D. Baron, N. Jafari, D. Bagchi, C. A. Dennen, A. Bowirrat, A. Pinhasov, P. K. Thanos, K. Sunder, K. T. Murphy, M. R. Makale, E. J. Modestino, K. U. Lewandrowski, A. Sharafshah, I. Elman, A. Pollack, C. Levin, R. K. A. Fiorelli, S. Schmidt, A. P. Lewandrowski, S. Mahajan, D. Gastelu, G. Martire, J. Morgan, and R. D. Badgaiyan. *Neurology (ECronicon)* 17, no. 2 (Feb 2025). [PMC12742807](https://doi.org/10.1212/NEO.0000000000001274)
240. **The Emerging Crisis in Non-Prescribed Ketamine Use: A Rapid Attenuation of Depression in Face of Abuse and "Chill-out" or Escapism Drug.** Lewandrowski, K. U., K. Blum, S. Schmidt, R. K. Alvim Fiorelli, M. S. Gold, K. Mohankumar, A. Sharafshah, D. Bagchi, A. Pinhasov, M. P. Lorio, E. J. Modestino, M. A. Madigan, D. Baron, A. P. L. Lewandrowski, C. A. Dennen, P. K. Thanos, and R. D. Badgaiyan. *Subst Use Misuse* (Feb 1 2026): 1-18. <https://dx.doi.org/10.1080/10826084.2025.2612330>.

241. **The Price of Silence: What 2 Decades of Policy-and a Pandemic-Have Taken from Spine Surgeons: An Independent Analysis.** Lorio, M. P., and K. U. Lewandrowski. *Int J Spine Surg* (Jan 21 2026). <https://dx.doi.org/10.14444/8848>.
242. **Beyond Stigma—Integrating Neurobiology, Genetics, and Awareness Integration Theory in Addiction Recovery.** Blum, Kenneth, Mark S Gold, Nicole Jafari, Kai-Uwe Lewandrowski, Alireza Sharafshah, Kavya Mohankumar, Morgan P Lorio, Abdalla Bowirrat, Albert Pinhasov, Kyriaki Z Thanos, Igor Elman, David Baron, Catherine A Dennen, Brian Fuehrlein, Alexander PL Lewandrowski, Edward J Modestino, Panayotis K Thanos, and Foojan Zeine. *Psychology Research and Behavior Management* 19 (2026): 1-14. <https://dx.doi.org/doi.org/10.2147/PRBM.S561157>.

PRESENTED PAPERS/SPEAKING ENGAGEMENTS:

1. **Accelerated Incorporation of cortical bone allografts following partial demineralization and laser-perforation.** Lewandrowski KU, Tomford WW, Ekkernkamp A, Muhr G. 57th Annual Meeting of the German Society for Traumatology, Berlin, Germany, November 22-25, 1995.
2. **MHC-Restriction of cytotoxic antibodies to bone allografts.** Lewandrowski KU, Tomford WW, Springfield D, Mankin HJ. 113th Congress of the German Society for Surgery, Berlin, Germany, April 9-13, 1996.
3. **Enhancement of incorporation of partially demineralized and laser- perforated cortical bone grafts.** Lewandrowski KU, Tomford WW, Schomacker KT, Deutsch TF, Mankin HJ. Orthopaedic Research Society, Orlando, 1996.
4. **Osteoinduction in cortical bone grafts by controlled demineralization and laser-perforation.** Lewandrowski KU, Tomford WW, Mankin HJ, Schollmeier G, Ekkernkamp A, Muhr G. XXXI Congress of the European Society for Surgical Research, Southampton, UK, March 31 - April 3, 1996.
5. **Enhancement of incorporation of partially demineralized and laser- perforated cortical bone grafts.** Lewandrowski KU, Tomford WW, Schomacker KT, Deutsch TF, Mankin HJ. Transactions of the Orthopaedic Research Society, 41:84-14, 1995.
6. **Sacral Resection in the Treatment of Recurrent Colorectal Cancer.** Lewandrowski KU, McLain, RF. Mid-America Orthopaedic Association, 23rd Annual Meeting, April 20-24, 2005, Amelia Island Plantation, Amelia Island, Florida.
7. **Vertebral Osteolysis after Posterior Interbody Lumbar Fusion with Recombinant Human BMP-2.** Kai-Uwe Lewandrowski, MD, Christopher J Nanson, MD, Roberto D Calderon, MD, Podium No: 447, 2007 Annual Meeting, American Academy of Orthopaedic Surgeons, February 12 – 16, 2007, San Diego.
8. **Technical Caveats of Endoscopic Transforaminal Microdiscectomy.** Visiting Professor for Joint Grand Rounds Spine Center Cedars Sinai, Department of Orthopaedics and Neurosurgery, Los Angeles, September 25, 2007.
9. **Early Clinical Results Using a New Transforaminal Endoscopic Technique for the Treatment of Disc Herniations and Foraminal Stenosis.** Visiting Professor for Joint Grand Rounds Spine Center Cedars Sinai, Department of Orthopaedics and Neurosurgery, Los Angeles, September 26, 2007.
10. **Endoscopic Transforaminal Microdiscectomy.** Station Director for Physician Cadaver Training Course at the 2. Annual Meeting of the Society for Minimally Invasive Spinal Surgery, San Diego, November 15, 2007.
11. **Transforaminal Endoscopic Decompression of Foraminal Stenosis.** Invited Presentation at the 2. Deutscher Wirbelsäulenkongress, Mannheim, 13. December, 2007.
12. **Techniques and Indications of Endoscopic Transforaminal Decompression:** Invited Presentation Annual Meeting Israeli Spine Society Meeting, Eilat, Israel April 7-8, 2008.
13. **Techniques and Indications of Endoscopic Transforaminal Decompression:** First World Congress of Minimally Invasive Spinal Surgery and Techniques, Honnulu, Hawaii, June 5-7, 2008.

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14. **Clinical Results of Endoscopic Transforaminal Decompression:** First World Congress of Minimally Invasive Spinal Surgery and Techniques, Honolulu, Hawaii, June 5-7, 2008.
15. **Outcomes with Transforaminal Lumbar Interbody Fusion.** Simpósio Internacional de Coluna (SINCOL / LASAS) 2011, Rio de Janeiro, August 1-3, 2011.
16. **Indications and Patient Selection For Lumbar Endoscopic Microdiscectomy and Stenosis Surgery.** Simpósio Internacional de Coluna (SINCOL / LASAS) 2011, Rio de Janeiro, August 1-3, 2011.
17. **Pitfalls, Tips and Tricks Endoscopic Lumbar Transforaminal Decompression.** Simpósio Internacional de Coluna (SINCOL / LASAS) 2011, Rio de Janeiro, August 1-3, 2011.
18. **Posterior Cervical Endoscopic Foraminotomy.** III WCMISS Congress Praia do Forte, Salvador Brazil, August 18, 2012.
19. **Debator Round Table Discussion.** III WCMISS Congress Praia do Forte, Salvador Brazil, August 18, 2012.
20. **Clasificación y Tratamiento Endoscopico de Estenose Lumbar.** III Simposio Cirurgia de Minima Agresion y Soluciones Biologicas En Columna y Rodilla. Centro Kennedy, Universidad de Chile, Santiago de Chile, August 28-30, 2013.
21. **Costo-Effectividad en la Cx de Fusión Lumbar.** III Simposio Cirurgia de Minima Agresion y Soluciones Biologicas En Columna y Rodilla. Centro Kennedy, Universidad de Chile, Santiago de Chile, August 28-30, 2013
22. **Complications of Endoscopic Transforaminal Microdiscectomy.** V SICCM Congress, Guanajuato Mexico, December 5-8, 2013.
23. **Indications and Techniques of Endoscopic Transforaminal Microdiscectomy.** V SICCM Congress, Guanajuato Mexico, December 5-8, 2013.
24. **Tricks and Pearls Oblique Lumbar Interbody Fusion.** V SICCM Congress, Guanajuato Mexico, December 5-8, 2013.
25. **Techniques and Indications for Endoscopic Lumbar Microdiscectomy and Lateral Recess Decompression.** World Congress of WFMISS April 8 – 12, 2014, Istanbul, Turkey.
26. **Techniques and Indication of Endoscopic Posterior Cervical Foraminotomy.** World Congress of WFMISS April 8 – 12, 2014, Istanbul, Turkey.
27. **Complications of Lumbar Endoscopic Microdiscectomy Surgery.** World Congress of WFMISS April 8 – 12, 2014, Istanbul, Turkey.
28. **Endoscopically Assisted Interbody Fusion Techniques.** World Congress of WFMISS April 8 – 12, 2014, Istanbul, Turkey.
29. **State of the Art of Videoendoscopy of the Spine** (Cirurgia videoendoscópica da coluna vertebral. Estado da Arte). Visiting Professor in the - UNIRIO - Universidade Federal de Exstato Rio de Janeiro - Masters Program in Videoendoscopy. VI SEMINÁRIO INTERNACIONAL DE CIRURGIA VIDEOENDOSCÓPICA. Programa de Pós-graduação em Medicina - Mestrado Profissional em Técnicas Videoendoscópicas. Programa de Pós-graduação em Neurologia - Mestrado e Doutorado em Neurologia. Anfiteatro Geral do HUGG 05 de Julho de 2014, Rio de Janeiro, Brazil.
30. **Endoscopically Assisted Interbody Fusion Techniques.** 57° Congresso De Neurocirurgia, November 5-8, 2014, Puerto Varas, Chile.
31. **Endoscopically Assisted Lumbar Rhizotomy In The Treatment of Axial Back Pain.** 57° Congresso De Neurocirurgia, November 5-8, 2014, Puerto Varas, Chile.
32. **Minimally Invasive Stand-Alone Anterior Lumbar Interbody Fusion Technique.** 57° Congresso De Neurocirurgia, November 5-8, 2014, Puerto Varas, Chile.

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33. **State of The Art of Lumbar Endoscopy. Minimally Invasive Surgery Section.** North American Spine Society. November 10, 2014, San Francisco.
34. **Outcomes and Complications with MIS Microdiscectomy.** Invited Guest Speaker, XII SIMINCO São Paulo, August, 28, 2015.
35. **Cervical Percutaneous Endoscopic Rhizotomy: Technique and Scientific Evidence.** Invited Guest Speaker, XII SIMINCO São Paulo, August, 28, 2015.
36. **Minimally Invasive Stand-Alone Anterior Lumbar Interbody Fusion: A Retrospective Review of 100 Patients.** Invited Guest Speaker, XII SIMINCO São Paulo, August, 28, 2015.
37. **What To Do With The Chronic Pain Patient Following Successful Lumbar Fusion. Diagnostic Work Up, Management, and Indications for Follow Up Surgeries.** Invited Guest Speaker, XII SIMINCO São Paulo, August, 28, 2015.
38. **Techniques and Indications for Endoscopic Lumbar Microdiscectomy and Lateral Recess Decompression.** IV Brain & Spine Symposium, September 17-20, 2015, Miami Beach.
39. **Endoscopically Assisted Interbody Fusion Techniques.** IV Brain & Spine Symposium, September 17-20, 2015, Miami Beach.
40. **Techniques and Indications for Endoscopic Posterior Cervical Foraminotomy.** IV Brain & Spine Symposium, September 17-20, 2015, Miami Beach.
41. **Complications of Lumbar Endoscopic Microdiscectomy Surgery.** IV Brain & Spine Symposium, September 17-20, 2015, Miami Beach.
42. **Techniques and Indication of Endoscopic Posterior Cervical Foraminotomy.** VII World Congress of Neuroendoscopy of the International Federation of Neuroendoscopy IFNE, November 1-4, 2015, Puerto Vallarta, Mexico.
43. **Complications of Lumbar Endoscopic Microdiscectomy Surgery.** VII World Congress of Neuroendoscopy of the International Federation of Neuroendoscopy IFNE, November 1-4, 2015, Puerto Vallarta, Mexico.
44. **Dynamic Stabilization. 5th World Congress of Minimally Invasive Spine Surgery & Techniques** the 15th Annual Meeting of Korean Minimally Invasive Spine Surgery Society the 5th Asian Congress of MISS (WCMISST 2016) held in Jeju Island, Korea from June 1st to 4th, 2016.
45. **Minimally Lumbar Interbody Fusion; Endoscopic vs Tubular.** 5th World Congress of Minimally Invasive Spine Surgery & Techniques the 15th Annual Meeting of Korean Minimally Invasive Spine Surgery Society the 5th Asian Congress of MISS (WCMISST 2016) held in Jeju Island, Korea from June 1st to 4th, 2016.
46. **Indicações, Técnicas E Resultados Das Vias Transforaminal E Lateral.** 1st International Symposium of Videoendoscopic Spinal Surgery. Hospital Naval Marcillo Dias. Rio de Janeiro, 16th Julho de 2016.
47. **Artrodesse Lombar Por Via Endoscópica.** 1st International Symposium of Videoendoscopic Spinal Surgery. Hospital Naval Marcillo Dias. Rio de Janeiro, 16th Julho de 2016.
48. **Utilidade Da Divisão Do Multifidus Nas Abordagens Posterior E Transforaminal Para A Fusão Intervertebral.** 1st International Symposium of Videoendoscopic Spinal Surgery. Hospital Naval Marcillo Dias. Rio de Janeiro, 16th Julho de 2016.
49. **Indicações E Técnicas De OLIF Assistida Endoscopicamente.** 1st International Symposium of Videoendoscopic Spinal Surgery. Hospital Naval Marcillo Dias. Rio de Janeiro, 16th Julho de 2016.
50. **Hérnias Extrusas e Sequestros Discais com Radiculopatia.** 1st International Symposium of Videoendoscopic Spinal Surgery. Hospital Naval Marcillo Dias. Rio de Janeiro, 16th Julho de 2016.
51. **Foraminoplastia Lombar Endoscópica - Indicações e Técnicas.** 1st International Symposium of Videoendoscopic Spinal Surgery. Hospital Naval Marcillo Dias. Rio de Janeiro, 16th Julho de 2016.

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52. **Artrodesse Lombar Por Via Endoscópica.** 1st International Symposium of Videoendoscopic Spinal Surgery. Hospital Naval Marcillo Dias. Rio de Janeiro, 16th Julho de 2016.
53. **Applied Micro-Anatomy of the Lumbar Lateral Recess and Neuroforamen.** Symposium Técnicas Modernas e Avanços da Cirurgia da Coluna Vertebral. 25 e 26 de November 2016. Hotel JP, Rodovia Anhanguera km 306.5, Ribeirão Preto – SP, Brazil.
54. **Interlaminar, and Full-Endoscopic Lumbar Decompression.** Symposium Técnicas Modernas e Avanços da Cirurgia da Coluna Vertebral. 25 e 26 de November 2016. Hotel JP, Rodovia Anhanguera km 306.5, Ribeirão Preto – SP, Brazil.
55. **Cost-Effectiveness of Spinal Endoscopy in Comparison to Open Lumbar Laminectomy.** Symposium Técnicas Modernas e Avanços da Cirurgia da Coluna Vertebral. 25 e 26 de November 2016. Hotel JP, Rodovia Anhanguera km 306.5, Ribeirão Preto – SP, Brazil.
56. **Indications, Techniques, and Clinical Outcomes with Cervical Rhizotomy and Laminectomy.** Symposium Técnicas Modernas e Avanços da Cirurgia da Coluna Vertebral. 25 e 26 de November 2016. Hotel JP, Rodovia Anhanguera km 306.5, Ribeirão Preto – SP, Brazil.
57. **Role of Transforaminal Decompression in Revision of Failed Complex Thoracolumbar Fusions.** Symposium Técnicas Modernas e Avanços da Cirurgia da Coluna Vertebral. 25 e 26 de November 2016. Hotel JP, Rodovia Anhanguera km 306.5, Ribeirão Preto – SP, Brazil.
58. **Standalone endoscopic lumbar interbody fusion for grade one spondylolisthesis with associated foraminal and lateral recess.** XVIII Congresso Nacional de Asociación Mexicana de Cirujanos de Collumna (AMCICO) September 14th, 2017, Accapulco, Mexico
59. **Advanced endoscopic lumbar Foraminoplasty techniques. Clinical outcomes with SAP resection.** XVIII Congresso Nacional de Asociación Mexicana de Cirujanos de Collumna (AMCICO) September 14th, 2017, Accapulco, Mexico
60. **Indication for Lumbar Endoscopy.** Who is a Good Surgical Candidate. VII Congreso Sociedad Interamericana de Cirugia de Columna Minimamente Invasiva (SICCMII), 9 – 11 November 2017, Santiago de Chile, Chile.
61. **Complications of Endoscopic Lumbar Surgery.** VII Congreso Sociedad Interamericana de Cirugia de Columna Minimamente Invasiva (SICCMII), 9 – 11 Novembre 2017, Santiago de Chile, Chile.
62. **Stand Alone Endoscopic Interbody Fusion for Grade I Spondylolisthesis.** VII Congreso Sociedad Interamericana de Cirugia de Columna Minimamente Invasiva (SICCMII), 9 – 11 November 2017, Santiago de Chile, Chile.
63. **Advanced Endoscopic Lumbar Foraminoplasty Techniques.** VII Congreso Sociedad Interamericana de Cirugia de Columna Minimamente Invasiva (SICCMII), 9 – 11 Novembre 2017, Santiago de Chile, Chile.
64. **Indications and Fusion Techniques Oblique Lumbar Intervertebral assisted with Endoscopy.** 1st Annual Meeting of the International Society of Endoscopic Spine Surgery (ISESS), November 30 to December 3, 2017, Guangzhou Shi, Guangdong Sheng, China.
65. **Percutaneous Endoscopic Transforaminal and Lateral Recess Decompression After Previous Spinal Surgery.** 1st Annual Meeting of the International Society of Endoscopic Spine Surgery (ISESS), November 30 to December 3, 2017, Guangzhou Shi, Guangdong Sheng, China.
66. **Readmission after Endoscopic Transforaminal Surgery.** Academic Exchange in Guangdong General Hospital, December 1st, 2017, Guangzhou Shi, Guangdong Sheng, China.
67. **Indications and Fusion Techniques: Oblique Lumbar Intervertebral Assisted with Endoscopy.** World Spine 8 Meeting, April 13-18 2018, Porto, Portugal.
68. **Complications of Lumbar Spinal Endoscopy.** World Spine 8 Meeting, April 13-18 2018, Porto, Portugal.
69. **Best Candidates for Lumbar Spinal Endoscopy.** 15 Curso Taller de Técnicas Avanzadas en Cirugía Endoscópica de Columna Lumbar. CLEMI Bogota Columbia, July 27-28, 2018.

70. **Indications and Fusion Techniques: Oblique Lumbar Intervertebral Assisted with Endoscopy.** 15 Curso Taller de Técnicas Avanzadas en Cirugía Endoscópica de Columna Lumbar. CLEMI Bogota Columbia, July 27-28, 2018.
71. **Complications of Lumbar Spinal Endoscopy.** 15 Curso Taller de Técnicas Avanzadas en Cirugía Endoscópica de Columna Lumbar. CLEMI Bogota Columbia, July 27-28, 2018.
72. **Endoscopic Lumbar Interbody Fusion.** eNeurospine Endoscopic Spine Surgery Symposium, 34th Annual Meeting North American Spine Society, September 24-28, Chicago IL.
73. **How to Manage Postoperative Problems after Lumbar Endoscopy.** Summer Meeting North American Spine Society, August 1- 4, 2019, Waikiki Beach Marriott Resort and Spa, Honolulu, HI.
74. **Preoperative Planning in Lumbar Spinal Endoscopy.** Summer Meeting North American Spine Society, August 1- 4, 2019 Waikiki Beach Marriott Resort and Spa, Honolulu, HI.
75. **Transforaminal Lumbar Endoscopic Decompression.** Instructional hands-on cadaver course 34th Annual Meeting North American Spine Society, September 24-28, 2019, Chicago IL.
76. **Transforming Your Practice with Minimally Invasive Spine Care Using Evidence-Based Validation.** Symposium Annual Meeting of the North American Spine Society, October 6-8, 2020. Moderators: Kai-Uwe Lewandrowski, MD and Anthony T. Yeung, MD.
77. **Introduction and Welcome: Mainstreaming, Implementation, Indications and Training Standards for MIS Spine Care.** Symposium Annual Meeting of the North American Spine Society, October 6-8, 2020. Kai-Uwe Lewandrowski, MD.
78. **Evidence-Based Validation and Implementation of Clinical Protocols Employing Prognosticators of Successful Outcomes with Novel MIS Techniques.** Symposium Annual Meeting of the North American Spine Society, October 6-8, 2020. Kai-Uwe Lewandrowski, MD.
79. **Closing Summary and Post-symposium Survey Demonstration.** Symposium Annual Meeting of the North American Spine Society, October 6-8, 2020. Kai-Uwe Lewandrowski, MD
80. **Symposium on Spinal Endoscopy. Supporting transitioning endoscopic spine surgery into your practice with clinical evidence. How to most effectively track your outcomes.** International Society for the Advancement of Spinal Surgery. Annual Conference, May 13 - Saturday, May 15, 2021 in Miami, FL at the Loews Miami Beach Hotel.
81. **Artificial Intelligence Application in Preoperative Lumbar MRI Analysis For Endoscopic Decompression Surgery.** Society For Brain Mapping & Therapeutics. Los Angeles Convention Center, March 10th to Sunday March 13th, 2022.
82. **MIS Difficulties, Challenges, and the learning Curve of Avoiding Complications with Endoscopic Spine Surgery.** Congreso de la Sociedad de Neurocirugía de Occidente 2022, Puerto Vallarta, July 13, 2022.
83. **Durability of Spinal Endoscopes.** Mexican Spine Society Meeting – AMCICO 2023, Cancun Sept 15-19, 2023.
84. **Artificial Intelligence in Spine Surgery.** Mexican Spine Society Meeting – AMCICO 2023, Cancun Sept 15-19, 2023.
85. **Meta-Analysis of Clinical Outcomes With Interspinous Process Spacers and Endoscopic Lumbar Decompression.** Mexican Spine Society Meeting – AMCICO 2023, Cancun Sept 15-19, 2023.
86. **Clinical Outcomes With Endoscopic Lumbar Fusions.** Mexican Spine Society Meeting – AMCICO 2023, Cancun Sept 15-19, 2023.
87. **Laser Decompression of Cervical Disc Herniations.** Mexican Spine Society Meeting – AMCICO 2023, Cancun Sept 15-19, 2023.
88. **Consequences and Treatment of Incidental Durotomy During Spinal Endoscopic Surgeons.** Mexican Spine Society Meeting – AMCICO 2023, Cancun Sept 15-19, 2023.

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89. **Clinical Trial Limitations in Orthopaedic Surgery.** International Orthopaedic Symposium. Colsanitas University, Bogota, Colombia, October 5 – 7, 2023.
90. **How To Publish Orthopaedic Research.** International Orthopaedic Symposium. Colsanitas University, Bogota, Colombia, October 5 – 7, 2023.
91. **The Future of Spinal Endoscopy.** ISMISS Meeting, Aichi, Japan March 15,16, 2024.
92. **Endoscopic decompression of lumbar spondylolisthesis.** 24th ISASS Meeting, Miami April 26-28, 2024.
93. **A comprehensive 4-layered in silico pharmacogenomic analysis on the Genetic Addiction Risk Severity (GARS®) Test: impactful molecular genetic evidence supporting a novel Pre-addiction assessment tool unveiling the mysteries of addictive behaviors.** Sharafshah, A., Lewandrowski, K., Elman, I., Baron, D., Thanos, P., Gold, M., Badgaiyan, R., C, J., Modestino, E., Khalsa, J., Gardner, E., Bowirrat, A., Gondre -Lewis, M., & Blum, K. (2024, Oct 21-23, 2024.). 10th international Conference on Neurology & Brain Disorders, Baltimore, Maryland, USA.

POSTER PRESENTATIONS:

1. **T-cell activation following large bone allograft transplantation.** Lewandrowski KU, Tomford WW, Springfield D, Mankin HJ. 113th Congress of the German Society for Surgery, Berlin, Germany, April 9-13, 1996.
2. **Age-related collagen shift in the human intervertebral disc.** Schollmeier G, Lahr-Eigen R, Uhthoff HK, Lewandrowski KU, Ekkernkamp A, Muhr G. XXXI Congress of the European Society for Surgical Research, Southampton, UK, March 31 - April 3, 1996.
3. **Modification of Cortical Bone Allografts by Partial Demineralization and Laser-Perforation.** Transactions of the Orthopaedic Research Society, 44, New Orleans.
4. **Osteoconductivity And Biocompatibility Of An Injectable And Bioresorbable Poly(Propylene Glycol-Co-Fumaric Acid) Bone Cement.** Kai-Uwe Lewandrowski, Joseph D. Gresser, Donald L. Wise, Roslyn L. White, and Debra J. Trantolo. Orthopaedic Research Society, Anaheim, 1999.
5. **Osteointegration and Dimensional Stability of Poly(Lactide-Co-Glycolide) Implants.** Kai-Uwe Lewandrowski, Joseph D. Gresser, Donald L. Wise, Roslyn L. White, and Debra J. Trantolo, Orthopaedic Research Society, Anaheim, 1999.
6. **Seeding of Cortical Bone Allografts Coated by Biodegradable Porous Foam Scaffolds.** Kai-Uwe Lewandrowski, Mario V. Cattaneo, Henning Madry, Shrikar P. Bondre, Enzo M. Caruso, Donald L. Wise, Gilda Barabino, William W. Tomford, Debra J. Trantolo. Orthopaedic Research Society, Orlando, Florida, 2000.
7. **Developing Porosity of Biodegradable Bone Graft Substitutes.** Kai-Uwe Lewandrowski, Joseph D. Gresser, Donald L. Wise, Debra J. Trantolo. Orthopaedic Research Society, Orlando, Florida, 2000.
8. **Improved Osteoconduction of Cortical Bone Grafts by Biodegradable Foam Coating.** Kai-Uwe Lewandrowski, Shrikar P. Bondre, Joseph D. Gresser, Donald L. Wise, William W. Tomford, Debra J. Trantolo. Orthopaedic Research Society, Orlando, Florida, 2000.
9. **Occult Oondoint fractures in Rheumatoids.** Lewandrowski KU, Baron JM, Curtin SL. Western Orthopaedic Association, July, Hawaii, 2005.
10. **Vertebral Osteolysis after Posterior Interbody Lumbar Fusion with Recombinant Human BMP-2.** Kai-Uwe Lewandrowski, MD, Christopher J Nanson, MD, Roberto D Calderon, MD, Poster Presentation Number: P352, 2007 Annual Meeting, American Academy of Orthopaedic Surgeons, February 12 – 16, 2007, San Diego

BOOK CHAPTERS

1. **Processing Of Cortical Allografts By Partial Demineralization And Laser Perforation To Enhance Incorporation: A Histologic, Biomechanical, And Immunological Study** Kai-Uwe Lewandrowski, Georg Schollmeier, Axel

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- Ekkernkamp, Henry J. Mankin, Hans K. Uthoff, William W. Tomford. In Altobelli, Lewandrowski, Trantolo, Yasemski, Wise, Wnek. Biomaterials in Human Applications, Humana Press, In Press, 1999.
2. **Coating Of Cortical Allografts with a Bioresorbable Polymer Foam for Surface Modification by Periosteal Cell Seeding.** Kai-Uwe Lewandrowski, Maurice V. Cattaneo, Joseph D. Gresser, Debra J. Trantolo, Lawrence Bonassar, Donald L. Wise, and William W. Tomford. In Altobelli, Lewandrowski, Trantolo, Yasemski, Wise, Wnek. Biomaterials in Human Applications, Humana Press, In Press, 1999.
 3. **Buffered Biodegradable Internal Fixation Devices.** Trantolo DJ, Lewandrowski KU, Gresser JD, Wise DL. In Biomaterials and Bioengineering Handbook, Marcel Dekker, March 2000, New York.
 4. **Biocompatibility of Self-Reinforced Poly(lactide-co-glycolide) implants.** Trantolo DJ, Lewandrowski KU, Gresser JD, Bozic KJ, Wise DL. In Biomaterials and Bioengineering Handbook, Marcel Dekker, March 2000, New York.
 5. **Coating of Cortical Allografts with a Bioresorbable Polymer Foam for Surface Modification by Periosteal Cell Seeding.** Lewandrowski KU, Cattaneo MV, Gresser JD, Trantolo DJ, Wise DL, Tomford WW. In Biomaterials and Bioengineering Handbook, Marcel Dekker, March 2000, New York.
 6. **Engineering of Biodegradable Grafts for Craniofacial Reconstruction.** Gresser JD, Lewandrowski KU, Trantolo DJ, Wise DL. In Biomaterials and Bioengineering Handbook, Marcel Dekker, March 2000, New York.
 7. **Processing of Cortical Allografts by Partial Demineralization and Laser Perforation to Enhance Incorporation.** K. U. Lewandrowski, H. K. Uthoff and W. Tomford. In Biodegradable Tissue-Equivalents - Basic Science, Engineering, And Clinical Applications, Marcel Dekker, 2001, New York.
 8. **Soluble Calcium Salts in Bioresorbable Bone Grafts.** J D. Gresser, K U. Lewandrowski, D. J Trantolo, D. L. Wise and Y Y Hsu, In Biodegradable Tissue-Equivalents - Basic Science, Engineering, And Clinical Applications, Marcel Dekker, 2001, New York.
 9. **Development of a Bioresorbable Interbody Fusion Device** K. U. Lewandrowski, J D. Gresser, D. Trantolo and D. L. Wise, In Biodegradable Tissue-Equivalents - Basic Science, Engineering, And Clinical Applications, Marcel Dekker, 2001, New York.
 10. **Osteointegration and Dimensional Stability of Poly(Lactide-Co-Glycolide) Implants Reinforced with Poly(Propylene Glycol-Co-Fumaric Acid).** J D. Gresser, K. U Lewandrowski, D. J Trantolo and D. L. Wise, In Biodegradable Tissue-Equivalents - Basic Science, Engineering, And Clinical Applications, Marcel Dekker, 2001, New York.
 11. **Osteoconductivity of an Injectable and Bioresorbable Poly(Propylene Glycolic Co-Fumaric Acid) Bone Cement.** D. J Trantolo, K U Lewandrowski, J D. Gresser and D. L. Wise, In Biodegradable Tissue-Equivalents - Basic Science, Engineering, And Clinical Applications, Marcel Dekker, 2001, New York.
 12. **Clinical And Biomechanical Design Considerations For Engineered Cortical Bone Allografts.** K.U. Lewandrowski, F. J. Horneck, F.X. Pedlow, M.C. Gebhardt, H.J. Mankin, W.W. Tomford, In Biodegradable Tissue-Equivalents - Basic Science, Engineering, And Clinical Applications, Marcel Dekker, 2001, New York.
 13. **Thoracolumbar Fractures: Evaluation, Classification, and Treatment.** K.U. Lewandrowski, R.F. McLain. In The Adult & Pediatric Spine. 3rd Edition, 817-843, Lippincott Williams & Wilkins, 2003, Philadelphia.
 14. **Cancer of the Spine. How big is the problem.** K.U. Lewandrowski, G.R. Bell, R.F. McLain. Cancer in the Spine. Comprehensive Care. Edited by R.F. McLain, M Markman, R.M. Bukowski, R. Macklis, E.C. Benzel, K.U. Lewandrowski. Humana Press, Totowa, NJ, January 2006.
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18. **The Pathophysiology of Spinal Metastases.** Daisuke Togawa, K.U. Lewandrowski.. Cancer in the Spine. Comprehensive Care. Edited by R.F. McLain, M Markman, R.M. Bukowski, R. Macklis, E.C. Benzel, K.U. Lewandrowski. Humana Press, Totowa, NJ, January 2006.
19. **Common Misperceptions and Fears of Spinal Fusion Surgery.** Lewandrowski KU. Minimally Invasive Spinal Fusion Techniques. Summit Communications, Armonk NY pp. 1 – 6, 2008.
20. **Lumbar Interbody Fusion: Techniques and Indications Adopted for Minimally Invasive Surgery.** McLain RF, Lewandrowski KU. Minimally Invasive Spinal Fusion Techniques. Summit Communications, Armonk NY pp. 137 – 160, 2008.
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22. **Long-Term Implications of Minimally Invasive Lumbar Spinal Fusion.** Lewandrowski KU. Minimally Invasive Spinal Fusion Techniques. Summit Communications, Armonk NY pp. 223 – 228, 2008.
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24. **Lumbar Interbody Fusion: Techniques and Indications Adopted for Minimally Invasive Surgery.** Robert F. McLain, Lewandrowski KU. Minimally Invasive Spinal (MIS) Fusion: Clinical Examples of Anatomy, Indications, and Surgical Techniques, Center For Advanced Spinal Surgery Publishing Division, pp. 127 – 152, 2011.
25. **Complications with use of rh-BMP-2 after Transforaminal Lumbar Interbody Fusion (TLIF).** Lewandrowski KU. Minimally Invasive Spinal (MIS) Fusion: Clinical Examples of Anatomy, Indications, and Surgical Techniques, Center For Advanced Spinal Surgery Publishing Division, pp. 167 – 178, 2011.
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27. **Spinal Endoscopy: Historical Perspective.** Lewandrowski KU. In Endoscopic Spinal Surgery, Kai-Uwe Lewandrowski, Sang-Ho Lee, Menno Ipreburg, JP Medical Publishers, New Delhi, India, ISBN: 9781907816277, pp. 1 – 6, 2013.
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- Neuroendoscopy and Interventional Pain Medicine (1 ed., pp. 50-65). Bentham Science Publishers. <https://doi.org/10.2174/97898152744931240201>
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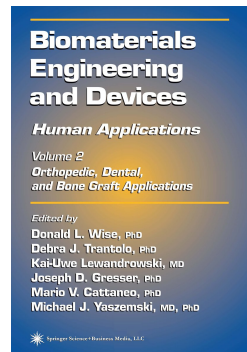
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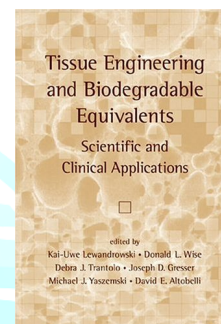
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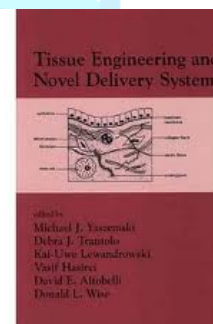
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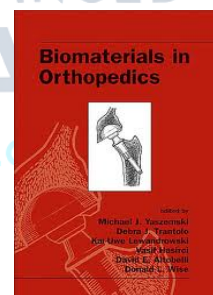
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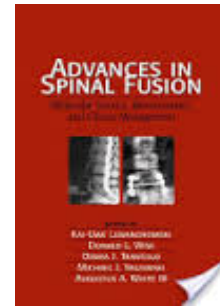
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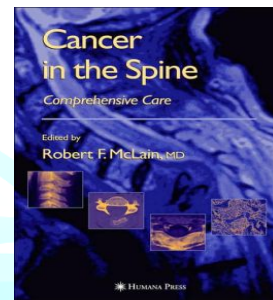
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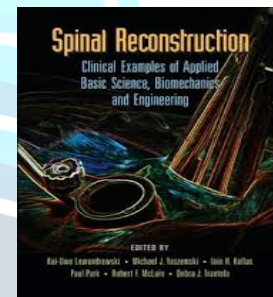
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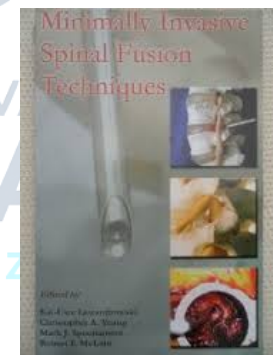
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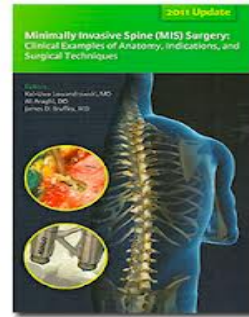
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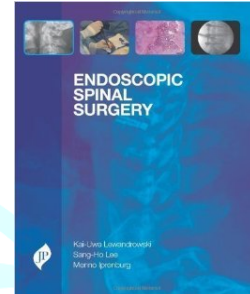
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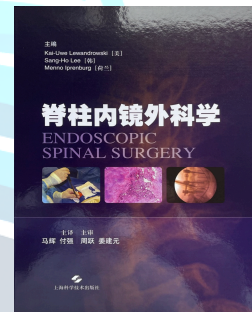
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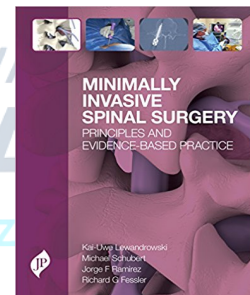
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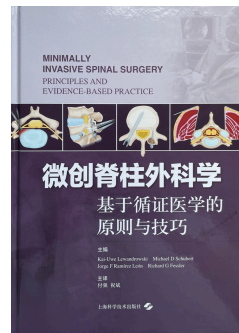
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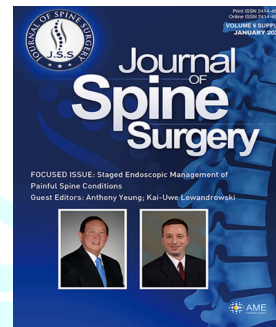
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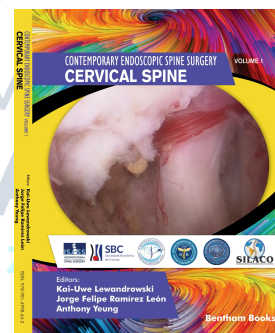
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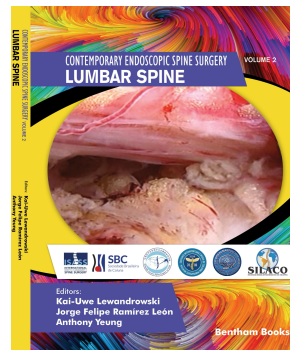
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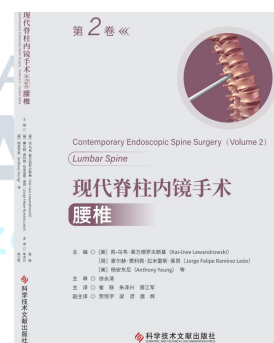
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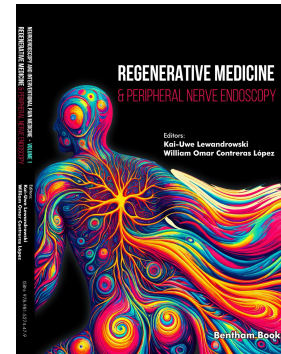
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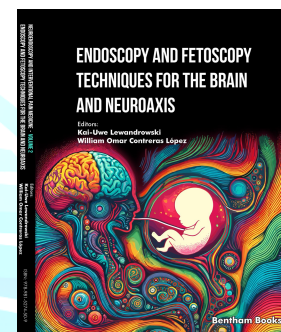
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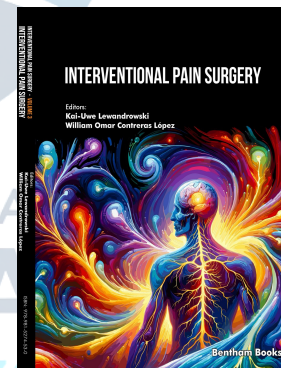
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PATENTS & TRADEMARKS

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May 31, 2005	6,899,107	Osteoinduction of cortical bone allografts by coating with biopolymers seeded with recipient periosteal bone cells
April 22, 2003	6,551,355	Tissue transplant coated with biocompatible biodegradable polymer.
April 15, 2003	6,548,002	Method of making a biodegradable interbody spinal fusion devices.
June 5, 2001	6,241,771	Resorbable interbody spinal fusion devices.
May 19, 2009	7,534,419	Methods of diagnosis and treatment of osteoporosis
Sept 24, 2019	5,867,644 A	Surgical procedure involving interbody fusion of the lumbar spine

Patents Referencing Works of Kai-Uwe Lewandrowski, MD

Jan 17, 2006	6986788	Intervertebral allograft spacer
Nov 27, 2007	7300465	Intervertebral allograft spacer
Aug 17, 2004	6776800	Implants formed with demineralized bone
Feb 15, 2005	6855169	Demineralized bone-derived implants
Jun 22, 2004	675283	Biocompatible osteogenic band for repair of spinal disorders



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