Jason M. Cuéllar M.D., Ph.D., FAAOS Fellowship-trained Orthopaedic Spine Surgeon

Business addresses:

658 West Indiantown Road, Suite 212 Jupiter, FL 33458

Telephone: 305-459-3175

4770 Biscayne Blvd, Suite 1100

Miami, FL 33137

Telephone: 305-459-3175

450 N. Roxbury Drive, 3rd Floor

Beverly Hills, CA 90210 Telephone: 310-385-7766

Fax: 310-385-9007

Office e-mail contact: cuellarofficeadr@gmail.com

Website: cuellarspine.com

Hospital and surgery center privileges:

Aventura Medical Center, Miami, FL
JFK Medical Center, Main and North Campus, Atlantis and West Palm Beach, FL
Jupiter Medical Center, Jupiter, FL
Cedars-Sinai Medical Center, Los Angeles, CA
DOCS Surgical Hospital, Los Angeles, CA

Surgery Centers:

Surg Center of Palm Beach Gardens, FL Lake Worth Surgical Center, Lake Worth FL Miami Surgical Center, Miami FL Advanced Surgical Center of Beverly Hills, Beverly Hills, CA Docs Surgical Center, Beverly Hills, CA

Education:

Undergraduate:

American River College – January 1998 to December 1999



Shasta College – September 1995 to December 1997

University of California, Davis – B.S. in Neurobiology, Physiology & Behavior – January 1999 to September 2000

Graduate School (Ph.D.):

University of California, Davis – Molecular, Cellular and Integrative Physiology

Start date: September 2000 Completed: December 2004

Doctoral advisor: Earl Carstens, Ph.D.

Medical School (M.D.):

Stanford University School of Medicine

Start date: August 1, 2004 Completed: June 14, 2009

Internship:

Orthopaedic Surgery, New York University Hospital for Joint Diseases

Start date: July 1, 2009 Completed: June 30, 2010

Program directors: Kenneth Egol M.D., Chair: Joseph D. Zuckerman M.D.

Residency:

Orthopaedic Surgery, New York University Hospital for Joint Diseases

Start date: July 1, 2010 Completed: June 28, 2015

Program directors: Kenneth Egol M.D., Chair: Joseph D. Zuckerman M.D.

Musculoskeletal Research Fellowship:

New York University Hospital for Joint Diseases

Start date: July 1, 2011 Completed: June 30, 2012

Research supervisor: Thorsten Kirsch, Ph.D.

Fellowship in spine surgery:

Spinal Disorders Fellowship, Cedars-Sinai Spine Center and Cedars-Sinai Medical

Center

Start date: August 1, 2015 Completed: July 31, 2016

Fellowship director: Hyun W. Bae, M.D.

Licensure:

- 1. New York State Medical License, ID #264397, Issued 2-22-2012 (inactive)
- 2. California State Medical License, ID #A135554, Issued 4-9-2015
- 3. Nevada State Medical License, ID # 21201, Issued 7-8-2021
- 4. Florida State Medical License, ID ME 151896, Issued 7-17-2021; renewed 12/13/22

Board certification:

American Board of Orthopaedic Surgery (ABOS) board certified: July 5, 2019

Professional experience:

- 1. Fellow of the American Academy of Orthopaedic Surgeons (FAAOS) 2022 to present.
- 2. Assistant Professor of Orthopaedic Surgery, Department of Orthopaedic Surgery, Cedars-Sinai Medical Center, Los Angeles, CA, 2018 to present.
- 3. **Medical Director, Advanced Surgical Center of Beverly Hills** (formerly known as Surgery Center of Beverly Hills) at 8750 Wilshire Blvd, May 2019 to present.
- 4. Musculoskeletal research fellow: Department of Orthopaedic Surgery, NYU Hospital for Joint Diseases, July 2011 to June 2012.
- Post-doctoral researcher: Department of Anesthesia, Stanford University School of Medicine, lab of David Yeomans, Ph.D., November 2004 to June 2009; full-time post-doc 2006.
- 6. Doctoral research assistant: Department of Neurobiology, Physiology & Behavior; University of California, Davis, laboratory of Earl Carstens, Ph.D. August 2000 to June 2004
- 7. Research assistant: School of Veterinary Medicine; Department of Anatomy, Physiology & Cell Biology; University of California, Davis, laboratory of Charles Plopper, PhD. April 1999 to September 2000.

Professional activities:

- 1. Scientific consultant for Nevro Corporation: 2005 to 2014
- 2. Scientific consultant for Cytonics Corporation: 2006 to 2015
- 3. Scientific Advisory Board for Cytonics Corporation: 2006 to present
- 4. Member International Society for the Advancement of Spine Surgery, ID#20030111501
- 5. Member North American Spine Society, ID#123771
- 6. Member American Academy of Orthopaedic Surgeons, ID#1032003
- 7. Member North American Neuromodulation Society
- 8. Medical advisory board for Axiom Regenerative Therapies
- 9. Medical Director, Advanced Surgical Center of Beverly Hills, June 2019 to present
- 10. Centinel Spine total disc replacement course faculty 2021 to present:
 - a. Las Vegas July 23, 2021
 - b. Miami June 10, 2022
 - c. Tampa April 15, 2023

Honors and special awards:

 Best basic science abstract for: Scuderi, GJ, Montesano, PX, Cuéllar JM. Improving response to treatment for patients with DDD by the use of molecular markers. Spine Intervention Society, 23rd annual meeting, Las Vegas NV, July 2015.

- 2. **Best paper award at ISSLS** Annual Meeting June 10, 2015, San Franciso, CA, USA. **Cuellar JM**, Stauff MP, Herzog R, Carrino JA, Baker G, Carragee EJ; USA Does provocative discography cause clinically important injury to the lumbar Intervertebral disc? A ten-year matched cohort study.
- 3. **2015 Frauenthal Award for Clinical Research, NYU HJD** for paper entitled "Does Aspirin Administration Increase Preoperative Morbidity in Patients with Cardiac Stents Undergoing Spinal Surgery?"
- 4. **2009 ISSLS Prize Winner co-author**: Does discography cause accelerated progression of degenerative changes in the lumbar disc: A ten-year cohort-controlled study. Spine 34(21):2338-45.
- 5. Stanford Anesthesia Departmental Research Award, 5/2008
- 8. Stanford Medical Research Scholar, 2006-2007
- 9. Graduation with honors, U.C. Davis, 2000 and 2004
- 10. Travel Award for 33rd annual Society for Neuroscience meeting, November 2003
- 11. Jastro-Shields Research Award. Fall 2000
- 12. Phi Sigma Society, Gamma Delta Chapter. January 2000.
- 13. Department citation for outstanding performance, Neurobiology, Physiology & Behavior, Class of 2000. June 2000.

Research grants and fellowships; patents received; clinical innovations:

- 1. <u>NIH R01</u> **DE018531**, 2007-2011. Project title: Chronic compression of the trigeminal ganglia. Co-investigator. \$2M, Principal investigator: David Yeomans
- 2. <u>NIH-SBIR Grant 1R43NS065669-01A1</u>; 2010-2011; by NINDS Cytonics Corporation; Diagnostic Biomarkers for Radicular Pain; \$1.5M, Co-investigator. Principal investigator: Gaetano Scuderi.
- 3. Musculoskeletal research fellow: Department of Orthopaedic Surgery, NYU Hospital for Joint Diseases, July 2011 to June 2012.
- 4. Post-doctoral researcher: Department of Anesthesia, Stanford University School of Medicine, lab of David Yeomans, Ph.D., November 2004 to June 2009; full-time post-doc 2006.

Academic Lectures/Presentations:

- 1. Cuéllar, Jason, Medical Grand Rounds at John F. Kennedy Hospital, Atlantis, Florida: Artificial Disc Replacement; June 9, 2022
- Cuéllar, J, Lanman, T, Mottole, N, Wernke, M, Carruthers, E and Valdevit A. Facet joint loading after one-, two-, and three-level cervical disc arthroplasty. Annual conference of the International Society for the Advancement of Spine Surgery (ISASS) 2022, Nassau, Bahamas, June 1-4.
- 3. Lanman, Cuéllar, J T, Mottole, N, Wernke, M, Carruthers, E and Valdevit A. Multi-level cervical disc arthroplasty does not alter the contribution to motion associated with the various loading modalities. Annual conference of the International Society for the Advancement of Spine Surgery (ISASS) 2022, Nassau, Bahamas, June 1-4.

- 4. Lanman, Cuéllar, J T, Mottole, N, Wernke, M, Carruthers, E and Valdevit A. Effects of single- and multi-level artificial disc replacements on the motion of the intervertebral disc space. Annual conference of the International Society for the Advancement of Spine Surgery (ISASS) 2022, Nassau, Bahamas, June 1-4.
- 5. Cuéllar, JM. Artificial disc replacement at the L5-S1 disc space. Annual Conference of Spinal Disorders, Cedars-Sinai, Las Vegas, NV, January 31, 2020.
- 6. Cuéllar, JM, Martin Quirno; Kirk Campbell, Andrew Yoo, , Christian M. Hoelscher, Pedro A. Ricart-Hoffiz, Tate M. Andres, Thorsten Kirsch, Thomas J. Errico. The Effect of Prophylactic Local Epidural Steroid Delivery in a Spinal Cord Injury Model. *Annual Meeting of the International Society for the Advancement of Spine Surgery (ISASS)*, Barcelona, Spain, March 20-23, 2012.
- Cuéllar JM, Marlen N, Cuéllar VG, Angst MS, Yeomans DC, Montesano PX. Cytokines in the intervertebral disc of patients undergoing lumbar anterior discectomy and interbody fusion for degenerative disc disease. *Annual Meeting of the International Society for the Advancement of Spine Surgery (ISASS)*, Barcelona, Spain, March 20-23, 2012
- 8. Cuéllar JM, Alataris K, Walker A, Yeomans DC, Antognini JF. Effect of High-Frequency Alternating Current on Spinal Afferent Nociceptive Transmission. Podium and poster presentations. *International Neuromodulation Society*, Berlin, Germany June 10-13, 2013.
- 9. Cuéllar JM, Petrizzo, A, Vaswani, R, Goldstein, JA, Bendo, JA. Does aspirin administration increase perioperative morbidity in patients with cardiac stents undergoing spinal surgery? AAOS Annual Meeting, Las Vegas, March 26, 2015
- 10. Spine grand rounds, "Artificial Disc Replacement"; June 29, 2016, Cedars-Sinai, Advanced Health Sciences Pavilion, Room PEC-5.
- Department of Orthopaedic Surgery Grand Rounds, "Artificial Disc Replacement", March 1, 2017, Cedars-Sinai Medical Center, Cancer Center Conference Room AC-1100

Teaching/Mentoring Activities

- 1. Lecture to orthopaedic surgery residents, Cedars-Sinai Medical Center, "Spinal infections" April 29, 2016.
- 2. Lecture to spine surgery fellows, Cedars-Sinai Medical Center, "Cervical myelopathy", November 1, 2017.
- 3. Spine Journal Club moderation with spine fellows and faculty; Cedars-Sinai Medical Center, January 9, 2019.
- 4. Lecture to spine surgery fellows, Cedars-Sinai Medical Center, "Total Disc replacement and motion-sparing surgery", February 5, 2020.
- 5. Lecture to spine surgery fellows, Cedars-Sinai Medical Center, "Cervical Total Disc replacement", December 20, 2021.

- 6. Lecture to spine surgery fellows and spine surgery department, Cedars-Sinai Medical Center, "Lumbar Total Disc replacement", January 19, 2022.
- 7. Lecture to spine surgery fellows and spine surgery department, Cervical Total disc replacement "Cervical Total Disc replacement", November 30, 2022.
- 8. Lecture to spine surgery fellows and spine surgery department, Cedars-Sinai Medical Center, "Lumbar Total Disc replacement", January 18, 2023.

Community Service and Volunteer Work:

- 1. Patzcuaro Hospital Experience and Language Program (Patzcuaro HELP) codirector 2004-2009.
- 2. Clinical volunteer and medical supply donation organization; Patzcuaro HELP program participant and director, Patzcuaro, Mexico 6/21/2005 to 8/21/2005
- 3. Operation Access Kaiser San Francisco, 9/24/05
- 4. Operation Access Kaiser South San Francisco February 26, 2005
- 5. Operation Access Mills Peninsula June 4, 2005
- 6. Community volunteer; U.C. Davis Medical Center, orthopaedics floor 1998-1999
- 7. Clinical volunteer and medical supply donation organization; Patzcuaro HELP program, Patzcuaro, Mexico 6/18/2001 to 8/18/2001
- 8. Big Brothers/Big Sisters of Sacramento -2/01/1999 to 6/01/2002
- 9. Clinical volunteer as spanish translator, Salud Clinic, Sacramento 10/01/2001 to 4/01/2002

Bibliography/publications:

A. Research papers – peer-reviewed:

- 1. Cuellar, JM, Rasouli, A, Lanman, T., Kanim, L and Delamarter, R. Single and multilevel lumbar total disc replacement adjacent to L5-S1 ALIF (lumbar hybrid): 6 years of follow up. *International Journal of Spine Surgery* 2021, Vol 15(5):971-977.
- 2. Cuellar, JM, Nomoto, E, Saadat, E., Ma, A, Hill, P., Kropf, M., Lanman, T., Perri, B., Siddique, K., Wagner, W. Rao, R., Wong, A., Eng, M., Stephan, S., Anand, A., Bae, H., Rasouli, A., Outpatient versus inpatient anterior lumbar spine surgery: A multisite, comparative analysis of patient safety measures. *International Journal of Spine Surgery* 2021, Vol 15(5):937-944,
- 3. Glaeser JD, Salehi K, Kanim LEA, NaPier Z, Kropf MA, Cuellar JM, Perry TG, Bae HW, Sheyn D. NF-kappaB inhibitor, NEMO-binding domain peptide attenuates intervertebral disc degeneration. Spine J. 2020 May 12:S1529-9430(20)30175-3. PMID 32413485
- 4. Ryu R, Do A, Chan J, Cuellar J, Schievink W, Baron EM. Postoperative CSF Leak After Lumbar Total Disc Replacement (TDR): A Diagnostic and Management Challenge. World Neurosurg. 2020 137:119-125.
- 5. Lanman, TH and Cuellar, JM. Restoration of spinal motion conversion of anterior cervical fusion with pseudarthrosis to artificial disc replacement. *International Journal of Spine Surgery* 2020 14(4):483-487.

- 6. **Cuellar, JM**, Wagner W and Rasouli, A. Low complication rate of anterior lumbar spine surgery in an ambulatory surgery center. *International Journal of Spine Surgery* 2020 14(5):687-693.
- 7. **Cuellar, JM**, Lanman TH and Rasouli, A. The Safety of Single- and Multi-level Cervical Total Disc Replacement in Ambulatory Surgery Centers. *Spine* 2020 15(8):512-521.
- 8. Rasouli A, **Cuellar JM**, Kanim, LEA, Delamarter, R. Multiple-level lumbar total disc replacement: a prospective clinical and radiographic analysis of motion preservation at 24 to 72 months. Journal of Clinical Spine Surgery, 2019, 32(1):38-42. PubMed ID 30095474
- 9. Glaeser JD, Salehi K, Kanim L, Sheyn D, NaPier Z, Behrens P, Garcia L, **Cuéllar JM**, Bae HW. Anti-inflammatory peptide attenuates edema and promotes BMP-2-induced bone formation in spine fusion. *Tissue Eng Part A*. 2018 May 16. PubMed ID 29766758.
- Tzabazis A, Kori S, Mechanic J, Miller J, Pascual C, Manering N, Carson D, Klukinov M, Spierings E, Jacobs D, Cuellar J, Frey WH 2nd, Hanson L, Angst M, Yeomans DC. Oxytocin and Migraine Headache. Headache. 2017 May;57 Suppl 2:64-75. Review. PubMed ID: 28485846.
- 11. **Cuellar, JM** and Lanman, TH. "Text Neck": An epidemic of the modern era of cell phones? The Spine Journal 2017, 17(6):901-902. PubMed ID 28336483
- 12. **Cuellar, JM** and Passias, P. Cervical Spondylotic Myelopathy: A review of clinical diagnosis and treatment. Bulletin of the Hospital for Joint Diseases 2017; 75(1):21-9.
- 13. Montesano, PX and **Cuéllar JM**. Cytokines in the intervertebral discs of patients undergoing lumbar discectomy and fusion for degenerative disc disease. Orthopedics and Rheumatology Open Access Journal 2017; 4(3):555638.
- 14. Montesano, PX, **Cuéllar JM** and Scuderi, GJ. Intradiscal injection of an autologous alpha-2-Macroglobulin (A2M) concentrate alleviates back pain in FAC-positive patients. Orthopedics and Rheumatology Open Access Journal 2017; 4(2):555634.
- Cuéllar JM, Cuéllar, V.G., Scuderi, G.J. Alpha-2-Macroglobulin: Autologous protease inhibition technology. Phys Med Rehabil Clin N Am 2016, 27(4):909-919, PubMed:2778907
- Cuéllar JM, Stauff MP, Herzog RJ, Carrino JA, Baker GA, Carragee EJ. Does provocative discography cause clinically important injury to the lumbar intervertebral disc? A 10-year matched cohort study. Spine J. 2016 Mar;16(3):273-80. 2015 Jun 29. PubMed: 26133255.
- Cuéllar JM, Field JS, Bae HW. Distraction Laminoplasty with Interlaminar Lumbar Instrumented Fusion (ILIF) for Lumbar Stenosis with or Without Grade 1 Spondylolisthesis: Technique and 2-year Outcomes. Spine 2016. PubMed ID: 26839990.
- 18. Cuéllar, VG, **Cuéllar**, **JM**, Kirsch, T and Strauss EJ. Correlation of synovial fluid biomarkers with cartilage pathology and associated outcomes in knee arthroscopy. *Arthroscopy October* 29, 2015
- 19. **Cuéllar JM**, Stauff MP, Herzog R, Carrino JA, Baker G, Carragee EJ; USA Does provocative discography cause clinically important injury to the lumbar Intervertebral disc? A ten-year matched cohort study. *The Spine Journal* 16(3):273-80
- 20. **Cuéllar JM**, Petrizzo, A, Vaswani, R, Goldstein, JA, Bendo, JA. Does aspirin administration increase perioperative morbidity in patients with cardiac stents undergoing spinal surgery? Spine 2015, 40(9):629-635. PubMed ID: 26030214
- 21. Tzabazis A, Mechanic J, Miller J, Klukinov M, Pascual C, Manering N, Carson DS, Jacobs A, Qiao Y, Cuellar J, Frey WH 2nd, Jacobs D, Angst M, Yeomans DC. Oxytocin

- receptor: Expression in the trigeminal nociceptive system and potential role in the treatment of headache disorders. *Cephalalgia*. 2015 Nov 20. PubMed ID: 26590611
- 22. Zhao YP, Tian QY, Liu B, Cuellar J, Richbourgh B, Jia TH, Liu CJ. Progranulin knockout accelerates intervertebral disc degeneration in aging mice. Sci Rep. 2015 Mar 16;5:9102. PubMed ID: 25777988.
- 23. **Cuéllar JM**, Yoo A, Tovar N, Coelho PG, Jimbo R, Vandeweghe S, Kirsch T, Quirno M, Errico TJ. The Effects of Amicar and TXA on Lumbar Spine Fusion in an Animal Model. Spine 2014, 39(19):E1132-1137; PubMed ID: 24979407.
- 24. **Cuéllar JM**, Golish, SR, Leroux, EJ, Reuter, MW, Carragee, EJ, Hanna, LS and Scuderi, GJ. Does a fibronectin and aggrecan complex play a role in painful vertebral disks? 2013 PMR 2013, 5(4):297-3021; PubMed ID: 23490723.
- 25. Cuéllar JM, Alataris K, Walker A, Yeomans DC, Antognini JF. Effect of High-Frequency Alternating Current on Spinal Afferent Nociceptive Transmission. Neuromodulation. 2013; 16(4):318-327; PubMed ID: 23252766
- 26. **Cuéllar JM**, Borges PM, Cuéllar VG, Yoo A, Scuderi GJ, Yeomans DC. Cytokine Expression in the Epidural Space: A Model of Non-compressive Disc Herniation-induced Inflammation. Spine 2013; 38(1):17-23 PubMed ID: 22648034
- 27. Golish SR, Hanna LS, **Cuéllar JM**, Fernyhough JC, Campbell DR, Carragee EJ, Scuderi GJ. Are persistently symptomatic vertebral compression fractures associated with abnormal inflammatory profiles? A prospective study. J Spinal Disord Tech. 2011 Apr;24(2):121-5. PubMed ID: 21445026.
- 28. Cuéllar VG, Cuéllar JM and Scuderi GS. Identification of meniscus damage biomarker: Implications for the future treatment of knee injury. *Therapy* 8(3):289-91, 2011.
- 29. Scuderi GJ, Golish SR, Cook FF, Cuéllar JM, Bowser RP, Hanna LS. (2011) Identification of a novel fibronectin-aggrecan complex in the synovial fluid of knees with painful meniscal injury. J Bone Joint Surg Am. 2011 Feb;93(4):336-40.
- 30. Cuéllar VG, Cuéllar JM, Vaccaro AR, Carragee EJ, Scuderi GJ. (2010) Accelerated degeneration after failed cervical and lumbar nucleoplasty. *J. Spinal Disord. Tech.* Dec;23(8):521-4.
- 31. Cuéllar VG, Cuéllar JM, Golish SR, Yeomans DC, Scuderi GJ. (2010) Cytokine profiling in acute anterior cruciate ligament injury. *Arthroscopy*. Oct;26(10):1296-301.
- 32. Cuéllar JM, Manering NA, Klukinov M, Nemenov MI, Yeomans DC. (2010) Thermal nociceptive properties of trigeminal afferent neurons in rats. *Molecular Pain*. Jul 7;6:39.
- 33. Tzabazis AZ, Niv SH, Manering NA, Klyukinov M, Cuéllar JM, Bhatnagar A, Yeomans DC. (2010) Trigeminal antihyperalgesic effect of intranasal carbon dioxide. Life Sci. 2010 Jul 3;87(1-2):36-41.
- 34. Scuderi GJ, Woolf N, Dent K, Golish SR, Cuéllar JM, Cuéllar VG, Yeomans DC, Carragee EJ, Angst MS, Bowser R, Hanna LS. (2010) Identification of a complex between fibronectin and aggrecan G3 domain in synovial fluid of patients with painful meniscal pathology. *Clinical Biochem.* Jul;43(10-11):808-14.
- 35. Cuéllar, J.M., Golish, S.R., Reuter, M.W., Cuéllar, V.G., Angst, M.S., Carragee, E.J., Yeomans, D.C. and Scuderi, G.J. Cytokine evaluation in individuals with low back pain using dscographic lavage. *The Spine Journal 2010 Mar*; 10(3):212-8.
- 36. Cuéllar J.M., Scuderi, G.J., Cuéllar V.G, Golish, S.R. and Yeomans, D.C.. (2009) Diagnostic utility of cytokine biomarkers in the evaluation of acute knee pain. *Journal of Bone and Joint Surgery Oct*; 91(10):2313-20.
- 37. Scuderi, G.J., Cuéllar, J.M., Cuéllar, V.G.., Yeomans, D.C., Carragee, E.J. and Angst, M.S. (2009). Epidural interferon gamma-immunoreactivity: a biomarker for lumbar nerve root irritation. *Spine Oct 1*; 34(21):2311-2317.

- **38.** Carragee, E.J., Don, A. Hurwitz, E. Cuéllar, J.M., Carrino, J. and Herzog, R. **2009** ISSLS Prize Winner: Does discography cause accelerated progression of degenerative changes in the lumbar disc: A ten-year cohort-controlled study. Spine 34(21):2338-45.
- 39. Merrill, A.W., **Cuéllar, J.M**., Judd, J.H., Carstens, M.I. and Carstens, E. (2008) Effects of TRPA1 agonists mustard oil and cinnamaldehyde on lumbar spinal wide dynamic range neuronal responses to innocuous and noxious cutaneous stimuli in rats. *J. Neurophysiol.* 99(2):415-425.
- 40. Dutton R.C., Cuéllar J.M., Eger E.I., Antognini, J.F. and Carstens E. (2007) Temporal and Spatial Determinants of Sacral Dorsal Horn Neuronal Windup in Relation to Isoflurane-induced Immobility. *Anesthesia & Analgesia* 105(6):1665-74.
- 41. Simons C.T., **Cuéllar J.M.**, Moore, J.A., Pinkerton K.E., Uyeminami D., Carstens M.I., Carstens E. (2005) Nicotinic receptor involvement in antinociception induced by exposure to cigarette smoke. *Neuroscience Letters* 389(2):71-6
- 42. **Cuéllar J.M.**, Antognini J.F., Montesano P.X. and Carstens, E. (2005) Application of nucleus pulposus to L5 dorsal root ganglion in rats enhances nociceptive dorsal horn neuronal windup. *Journal of Neurophysiology* 94(1):35-48
- 43. Cuéllar, J.M., Dutton, R.C., Antognini, J.F. and Carstens, E. (2005) Differential effects of halothane and isoflurane on dorsal horn neuronal windup and excitability. *British Journal of Anesthesiology* 94(5):617-25
- 44. **Cuéllar, J.M.**, Antognini, J.F. and Carstens, E. (2004) An *in vivo* method for recording single unit activity in lumbar spinal cord in mice anesthetized with a volatile anesthetic. *Brain Research Protocols* 13(2):126-134.
- 45. Cuéllar, J.M., Antognini, J.F., Eger, E.I and Carstens, E. (2004) Halothane depresses C-fiber evoked windup of deep dorsal horn neurons in mice. *Neuroscience Letters* 363(3):207-11
- 46. **Cuéllar, J.M.**, Montesano, PX, Carstens, E (2004) Role of TNF-alpha in sensitization of nociceptive dorsal horn neurons induced by application of nucleus pulposus to L5 dorsal root ganglion in rats. *Pain* 110(3):578-587
- 47. Nojima, H, **Cuéllar, JM**, Simons, CT, Carstens, MI, Carstens, E (2004) Spinal *c-fos* expression associated with spontaneous biting in a mouse model of dry skin pruritis. *Neuroscience Letters* 361(1-3):79-82.
- 48. Nojima, H., Simons, C.T., **Cuéllar, J.M.**, Iodi-Carstens, M., Moore, J.A., Carstens, E. (2003) Opioid modulation of scratching and spinal *c-fos* expression evoked by intradermal serotonin. *The Journal of Neuroscience* 23(34):10784-10790
- 49. Boucher, Y., Simons, C. T., **Cuéllar, J. M.,** Jung, S. W., Carstens, M. I., Carstens, E. (2003) Activation of brain stem neurons by irritant chemical stimulation of the throat assessed by c-fos immunohistochemistry. *Experimental Brain Research* 148 (2):211-8
- 50. Cuéllar, J. M., Jinks, S. L., Simons, C. T., Carstens, E. (2003) Deletion of the preprotachykinin A gene in mice does not reduce scratching behavior elicited by intradermal serotonin. *Neuroscience Letters* 339(1):72-6

Book Chapters:

- Cuéllar, J.M. and Carstens, E. Sensitization in animal models of radiculopathic pain. In: <u>Hyperalgesia</u>: <u>Molecular Mechanisms and Clinical Implications, Progress in Pain</u> <u>Research and Management, Vol. 30</u>; Editors: Brune, K and Handwerker, H.O. IASP <u>Press 2004</u>.
- 2. **Cuéllar, J.M.** and Carstens, E. Electrophysiological evidence of enhanced nociceptive transmission in response to dorsal root exposure to nucleus pulposus. In: <u>Immune and Glial Regulation of Pain</u>; Editors: Linda Watkins, Joyce DeLeo, and Linda Sorkin; IASP Press 2007.

- **3.** Cuéllar, J.M. and Carragee, E.J. Ch 27 Basic science of discography and provocative testing. In: <u>Basic Science of Spinal Diseases</u>; Editors: Alok Sharan, Simon Tang and Alexander Vaccaro. Jaypee Press, 2013
- 4. **Cuéllar, J.M.** and Hyun Bae. Posterior Cervical Laminoplasty. In: Operative Techniques in Spine Surgery, 3rd Edition. Editors: Alexander R. Vaccaro and Eli M. Baron
- 5. **Cuéllar, J.M,** Kim, Terrence, Bhamb, Neil and Lanman, Todd H. Cervical Total Disc Replacement. In: Operative Techniques in Spine Surgery, 3rd Edition. Editors: Alexander R. Vaccaro and Eli M. Baron
- Zachary NaPier, Linda E.A. Kanim, Samantha Thordarson, Michael A. Kropf, Jason M. Cuéllar, Juliane D. Glaeser, Hyun W. Bae, Demineralized Bone Matrix Bone Biology and Clinical Use, Seminars in Spine Surgery, Volume 28, Issue 4, December 2016, Pages 196-216, ISSN 1040-7383
- Kong, C and Cuéllar, J.M. Overview of the back and spine. Gray's Surgical Anatomy. 1st edition, Dec 2019. ISBN 9780702073861

Abstracts from national and international scientific conferences:

- 1. Cuellar JM and Lanman, TH. Motion restoration in the cervical spine. In symposium: Cervical disc replacement 2.0: When do things go wrong. North American Spine Society, October 2022, Chicago, IL
- 2. Cuellar, JM, Lanman TH, Mottole, N, Wernke, M and Valdevit, A. Facet loading after one-, two- and three-level cervical disc arthroplasty. North American Spine Society, October 2022, Chicago, IL
- 3. Cuellar, JM, Lanman TH, Mottole, N, Wernke, M and Valdevit, A. Relative vertebral motion after one-, two- and three-level cervical disc arthroplasty. North American Spine Society, October 2022, Chicago, IL
- 4. Glaeser JD, Salehi K, Kanim L, NaPier Z, Kropf M, Cuellar J, Sheyn D, and Bae HW, Treatment with the NFkB inhibitor reduces overloading-induced MMP expression in human nucleus pulposus cells, North American Spine Society, October 2017, Orlando, FL.
- 5. G. Scuderi, J. Cuellar, P. Montesano; Intradiscal injection of an autologous alpha-2-macroglobulin (A2M) concentrate alleviates back pain in FAC-positive patients; ISASS April 6-8, 2016, Las Vegas, NV.
- 6. Gaetano J Scuderi, Pasquale X Montesano and Jason Cuellar MD; Improving Response to Treatment for Patients with DDD by the use of Molecular Markers. AAOS Annual Meeting, March 2016, Orlando, FL.
- 7. **Cuellar JM**, Stauff MP, Herzog R, Carrino JA, Baker G, Carragee EJ; USA Does provocative discography cause clinically important injury to the lumbar Intervertebral disc? A ten-year matched cohort study. ISSLS Annual Meeting June 10, 2015, San Franciso, CA, USA. **Best paper award.**
- **8.** Gaetano J. Scuderi, S. Raymond Golish, **Jason M. Cuellar**, Pasquale X. Montesano. Improving Response to Treatment for Patients with DDD by the use of Molecular Markers. North American Spine Society Annual Conference, San Francisco, October 14-17, 2015.

- 9. Cuéllar VG, Cuéllar, JM, Kirsch T and Strauss EJ. Identification of Synovial Fluid Biomarkers for Cartilage Pathology and Associated Outcomes in Knee Arthroscopy, AAOS Annual Meeting, Las Vegas, March 26, 2015
- 10. Cuéllar JM, Petrizzo, A, Vaswani, R, Goldstein, JA, Bendo, JA. Does aspirin administration increase perioperative morbidity in patients with cardiac stents undergoing spinal surgery? AAOS Annual Meeting, Las Vegas, March 26, 2015
- 11. **Cuéllar JM**, Alataris K, Walker A, Yeomans DC, Antognini JF. Effect of High-Frequency Alternating Current on Spinal Afferent Nociceptive Transmission. Podium and poster presentations. *International Neuromodulation Society*, Berlin, Germany June 10-13, 2013.
- 12. Cuéllar VG, Cuéllar JM, Browning, S, Scuderi GJ, Golish SR, Hanna LS. Is there a chrondroprotective effect of autologous protease inhibitor concentrate on an osteoarthritis rabbit model? A pilot study. Orthopaedic Research Society Annual Meeting, Jan 26-29, 2013, San Antonio, Texas.
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