EDUCATION

Functional Medicine Certification: American Academy of Functional Health	2021 – 2022
Interventional Pain Management Fellowship: Texas Tech University Health Sciences Center, Lubbock, TX Emphasis on safe advanced interventional procedures	2006 – 2007
Anesthesiology Residency Years 2 & 3: University of Iowa Hospitals and Clinics, Iowa City, IA	2004 – 2006
Anesthesiology Residency Year 1: New York Methodist Hospital, Brooklyn, NY	2003 – 2004
Internal Medicine Internship: St. Joseph's Hospital, Phoenix, AZ	2002 – 2003
University of Oklahoma College of Medicine, Oklahoma City & Tulsa, OK Doctor of Medicine	1998 – 2002
Oral Roberts University, Tulsa, OK Bachelor of Science – <i>Cum Laude</i>	1994 – 1998
PROFESSIONAL EXPERIENCE	
PROFESSIONAL EXPERIENCE Founder, Pain Relief and Wellness.	2021 –Present
	2021 –Present 2022 –Present
Founder, Pain Relief and Wellness.	
Founder, Pain Relief and Wellness. Founder, Bladder Centers of America	2022 –Present
Founder, Pain Relief and Wellness. Founder, Bladder Centers of America Founder, MD Care Homes: Residential Assisted Living Homes. American Society of Pain and Neuroscience Society (ASPN), Board of Directors &	2022 –Present 2023 –Present
Founder, Pain Relief and Wellness. Founder, Bladder Centers of America Founder, MD Care Homes: Residential Assisted Living Homes. American Society of Pain and Neuroscience Society (ASPN), Board of Directors & Leadership Council Creighton University School of Medicine,	2022 –Present 2023 –Present 2018 –Present

Adjunct Instructor

Medical Director, Mountain View Surgery Centers (Chandler, Glendale, and Scottsdale)	2013 – 2023
HOPE Research Institute Clinical Investigator	2019 – 2023
Nevro Faculty and Consultant	2018 – Present
Omnia Medical Faculty and Consultant	2021 – 2022
Vertiflex Faculty	2018
St. Jude Medical, Radiofrequency Ablation - Advisory Board	2015
St. Jude Medical, Neuromodulation Journal – Editorial Review Board	2015
Current Neuropharmacology Journal – Editorial Reviewer	2015
Journal of Clinical Monitoring and Computing – Editorial Reviewer	2015
Pain Doctor, Inc., Medical Director	2014 – 2021
Axonics- Medical Advisory Board	2014
Stryker Physician Peer-to-Peer ACE Training, Faculty	2014
Systems and Methods for Treatment of Intervertebral Disc Derangements Patent Applicant	2013 –Present
Holistic Pain: Natural Pain Relief, Founder and Developer	2013 –Present
Stryker Interventional Spine, Faculty and Consultant	2013 – 2017
Pain Doctor, Inc., Advanced Interventional Pain Fellowship, Fellowship Director	2012 – 2017
American Society of Interventional Pain Physicians, Arizona Chapter Board of Directors	2011 – 2023
Neuromodulation Journal: Technology at the Neural Interface, Editorial Reviewer	2011 – Present
Highly Complex Lab, Laboratory Supervisor	2011 – 2021
Boost Medical Consulting and Practice Management. BoostMedical.com, Founder	2010 – 2021

PainDoctor.com – The Global Pain Knowledge Base, Founder and Board of Directors	2010 – 2021
Multiple IRB Approved Research Studies, Principal Investigator	2010 –2023
PainDoctor.com, Clinical Editor	2010 – 2017
Arizona Pain Monthly Magazine, Clinical Editor	2010 – 2012
St. Joseph's Hospital – Resident Rotation, Preceptorship Director	2010 – Present
St. Jude Medical, Neuromodulation Academy, Faculty and Consultant	2009 – 2017
St. Jude Medical Physician Peer-to-Peer Training, One of the premier sites in the county	2009 – 2017
Arizona Pain Foundation, Founder and Chairman	2008 – Present
A Comprehensive Approach to pain Management. Online Pain Textbook, Clinical Editor	2008 – 2021
Boston Scientific, Faculty	2008
Arizona Pain – We Change Lives Here, Founder	2007 – 2021
Arizona Pain, Medical Director	2007 – 2021
Mayo Clinic Department of Anesthesiology and Pain Medicine, Rochester, MN Clinical Instructor	2007 – 2010
Texas Tech Pain Medicine, Co-Chief Fellow	2007
Medical Mission Trip to Bolivia, Team Leader	March 2000
Oklahoma Chapter: Christian Medical & Dental Association, Vice President	1999 – 2000
Medical and Dental Mission Trip to Nepal, Team Leader	June 1998
ORU Missions Department: Africa, Regional Coordinator	1997 – 1998
Medical Mission Trip to Cameroon Africa, Team Leader	June 1997

U.S. PATENTS

 Systems and Methods for Treatment of Intervertebral Disc Derangements. https://patents.google.com/patent/US10449055B2/en (2019).

Patent No.: US 10,449,055 B2. Inventor: Tory L. McJunkin, MD.

 Systems and Methods for Treatment of Intervertebral Disc Derangements. <u>https://patents.google.com/patent/US11369482B2/en</u> (2022). Patent No.: US 11,369,482 B2. Inventor: Tory L. McJunkin, MD.

PUBLICATIONS

- Hatheway, J., Yang, M., Fishman, M.,...McJunkin, T., et al. (2023). Defining the Boundaries of Patient Perception in Spinal Cord Stimulation Programming. Neuromodulation Journal.
- Mekhail, N., Levy R., Deer, T.,...McJunkin, T., et al. (2023). ECAPcontrolled closed-loop versus open-loop SCS for the treatment of chronic pain: 36-month results of the EVOKE blinded randomized clinical trial. *Regional Anesthesia Pain Medicine Journal.*
- Kapural, L., Patterson, D., Li, S.,...McJunkin, T., et al. (2023). Multiphase Spinal Cord Stimulation in Participants with Chronic Back or Leg Pain: Results of the BENEFIT-02 Randomized Clinical Trial. *Neuromodulation Journal.*
- 4. **McJunkin, T.** (2023). *Sacral Neuromodulation for the Treatment of Bladder and Bowel Dysfunction.* Textbook
- 5. McJunkin, T. and Denniston, R (2023). *Bladder Health 101* Ebook.
- 6. McJunkin, T. and Denniston, R (2023). *Fecal Incontinence*. Ebook.
- 7. **McJunkin, T.** and Denniston, R (2023). *Conquering Overactive Bladder: Your Ultimate Guide to Sacral Neuromodulation.* Ebook.
- 8. **McJunkin, T.** and Denniston, R (2023). *Nightly Echoes: Navigating the World of Nocturia and Overactive Bladder.* Ebook.
- 9. McJunkin, T. (2023). The 7 Hidden Dangers of Overactive Bladder. Ebook.
- 10. **McJunkin, T**., Cook, A., and Swing, T. (2023). Allograft Therapies in Regenerative Medicine. *Regenerative Medicine: A Complete Guide to Musculoskeletal and Spine Disorders.* Springer.
- 11. Mekhail, N., Deer, T., Levy, R.,...**McJunkin, T**., et al. (2022). Durability of Clinical and Quality of Life Outcomes of Closed-Loop Spinal Cord

Stimulation for Chronic Back and Leg Pain: A secondary analysis of the EVOKE Study. *JAMA Neurology*.

- 12. Amirdelfan, K., Bae, H., McJunkin, T., DePalma, M., et al. (2022). Two-Year Clinical and Quality of Life Outcomes of Closed-Loop Spinal Cord Stimulation to Treat Chronic Back and Leg Pain: A Double-Blind, Randomised, Controlled Trial (Evoke Study). *The Lancet Neurology*.
- 13. **McJunkin, T.**, May, B., Maita, M., and Lynch, J. (2022). Internal Pulse Generator Site Creation, Consideration, and Risk Mitigation. *Neuromodulation Techniques for Pain Treatment*. Springer, 227-44.
- 14. Chen, J., K., Hesseltine, A., Nashi, S, Sills, S, McJunkin, T., et al. (2021). A Real-World Analysis of High Frequency 10 kHz Spinal Cord Stimulation for the Treatment of Diabetic Peripheral Neuropathy. *Journal of Diabetes Science and Technology*.
- 15. Amirdelfan, K., Bae, H., McJunkin, T., DePalma, M., et al. (2021). Allogenic Mesenchymal Precursor Cells Treatment for Chronic Low Back Pain Associated with Degenerative Disc Disease: A Prospective Randomized, Placebo-Controlled 36-Month Study of Safety and Efficacy. *The Spine Journal.*
- Gupta, M., Scowcroft, J., Kloster, D., Carlson, J., McJunkin, T., et. al. (2020). 10-kHZ Spinal Cord Stimulation for Chronic Postsurgical Pain: Results From a 12-Month Prospective, Multicenter Study. *Pain Practice Journal.*
- 17. **McJunkin, T.**, Lynch, P., and Swing, T. (2019). The Opioid Epidemic and the Need for a Pain Strategy. *Deer's Treatment of Pain.* Springer, 21-33.
- McJunkin, T., Lynch, P., and Swing, T. (2019). Percutaneous Thoracic Neurostimulation for Chronic Pain. *Deer's Treatment of Pain*. Springer, 561-64.
- 19. Yang, A., Hunter, C., and **McJunkin, T**. (2019). PRP Therapies (Tendons, Joints, Spine). *Deer's Treatment of Pain.* Springer, 749-56.
- 20. **McJunkin, T.**, Lynch, P., and Swing, T. (2019). Vertebral Augmentation for Painful Vertebral Compression Fractures. *Deer's Treatment of Pain*. Springer, 773-77.
- 21. Deer, T., Grider, J.,...McJunkin, T., Carlson, J., et al. (2018). The MIST Guidelines: The Lumbar Spinal Stenosis Consensus Group Guidelines for Minimally Invasive Spine Treatment. *Pain Practice Journal.*

- Hunter, C., Sayed, D., Lubeno, T., Davis, T., Carlson, J., Rowe, J., Justiz, R., McJunkin, T., et al. (2018). DRG Focus: A Multicenter Study. *Neuromodulation.*
- 23. McJunkin, T., Swing, E., and Lynch, P. Amniotic Tissue: Advanced Regenerative Medicine. Advanced Procedures for Pain Management. New York, NY: Springer, 2018.
- 24. Diwan, S., Deer, T., Cordner, H., Sayed, D., Carlson, J., and **McJunkin, T**. Superion: An Indirect Lumbar Decompression. *Advanced Procedures for Pain Management*. New York, NY: Springer, 2018.
- 25. McJunkin, T. L., Swing, E. L., Walters, K., Lynch, P. J. (2017). Multidisciplinary management for chronic pain rehabilitation. In A. Carayannopoulos. (Ed.), *Comprehensive Pain Management in the Rehabilitation Patient*. New York, NY: Springer.
- 26. McJunkin, T. L., Maita, M., Swing, E. L., & Lynch, P. J. (2017). Kyphoplasty and vertebroplasty: Treating painful vertebral compression fractures. In A. Carayannopoulos. (Ed.), *Comprehensive Pain Management in the Rehabilitation Patient*. New York, NY: Springer.
- Carlson, J., McJunkin, T. L., Walters, K., & Swing, E. L. (2017). Spinal cord stimulation for chronic pain in rehabilitation medicine. In A. Carayannopoulos. (Ed.), *Comprehensive Pain Management in the Rehabilitation Patient*. New York, NY: Springer.
- 28. McJunkin, T. L., Henwood, B., Swing, E. L., & Anderson, J. A. (2017). Complex regional pain syndrome in a pain rehabilitation context. In A. Carayannopoulos. (Ed.), *Comprehensive Pain Management in the Rehabilitation Patient.* New York, NY: Springer.
- 29. Deer, T., Provenzano, D.,...**McJunkin, T.**, et al. (2017). The Neurostimulation Appropriateness Consensus Committee (NACC) Recommendations for Infection Prevention and Management. *Neuromodulation*, 20, 31-50.
- Deer, T., Skaribas, I., McJunkin, T., Nelson, C., et al. (2016). Results from the Partnership for Advancement in Neuromodulation Registry: A 24-Month Follow-Up. *Neuromodulation*, 19, 179-187.
- 31. Deer, T., Pope, J.,...McJunkin, T., et al. (2016). Prospective, Multicenter, Randomized, Double-Blinded, Partial Crossover Study to Assess the Safety and Efficacy of the Novel Neuromodulation System in the Treatment of Patients with Chronic Pain of Peripheral Nerve Origin. Neuromodulation, 19, 91-100.

- 32. **McJunkin, T. L.,** Lynch, P. J., & Deer, T. Peripheral nerve stimulation miniaturization. Chapter 31 in T. Deer (Ed.), *Atlas of Implantable Pain Therapies, 2nd edition, Springer Science Media,* 2016.
- 33. Deer, T., Krames, E., Leong, M., Stanton-Hicks, M., Golovac, S., Kapural, L., Alo, K., Foreman, R., Caraway, D., Narouze, S., Van Buyten, J. P., Linderoth, B., Prager, J., Feler, C., Pope, J., Poree, L., Lynch, P. J., McJunkin, T. L., Staats, P., Liem, L., & Williams, K. (2014). The Appropriate Use of Neurostimulation: New and Evolving Neurostimulation Therapies and Applicable Treatment of Disease States for Chronic Pain. *Neuromodulation*, *17*, 599-615.
- 34. Deer, T., Thomson, S., Raso, L., Burton, A., DeAndres, J., North, R., Buvanendran, A., Liem, L., Pope, J., Kumar, K., Feler, C., Abejon, D., Eldabe, S., Kloth, D., Kim, P., Provenzano, D., Hayek, S., Staats, P., McJunkin, T. L., Lynch, P. J., Kapural, L., Caraway, D., & Alo, K. (2014). The Appropriate Use of Neurostimulation: Avoidance and Treatment of Complications of Neurostimulation Therapies for the Treatment of Chronic Pain. *Neuromodulation*, *17*, 571-598.
- 22. Deer, T., Skaribas, I., Nelson, C., Tracy, J., Meloy, S., Darnule, A., Salmon, J., Pahapill,
 P. A., McJunkin, T., et al. (2014), Interim Results from the Partnership for Advancement in Neuromodulation Pain Registry. *Neuromodulation*, 17: 656-664.
- Bae, H.W., Amirdelfan, K., Coric D., McJunkin, T.L., et al. (2014). A Phase II Study Demonstrating Efficacy and Safety of the Mesenchymal Precursor Cells in Low Back Pain Due to Disc Degeneration. *The Spine Journal*. 11, S31-32.
- 36. McJunkin, T. L., Lynch, P. J., Tilghman, J., Hogan, P., Wuollet, A., Swing, E. L. (2014). Comprehensive management of chronic knee pain. *Pain Medicine News*, 12(6). Lynch, P. J., McJunkin, T. L., Miravite, M., Swing, E. L. (2013). What to expect from ICD-10. *Pain Medicine News*, 11(11).
- 37. McJunkin, T. L., Lynch, P. J., Micklos, L., Swing, E. L. (2013). Patient opioid disengagement. *Pain Medicine News*, *11(9)*.
- Lynch, P. J., McJunkin, T. L., Wallmann, A., Swing, E. L. (2013).
 Neuromodulation for post-amputation pain. *Pain Medicine News*, 11(8).
- McJunkin, T. L., Lynch, P. J., Anderson, J., Kanner, J., Swing, E. L. (2013). Psychological screening of patients for spinal cord stimulator treatment. *Pain Medicine News*, 11(6).

- 40. Carlson, J., Lynch, P. J., **McJunkin, T. L.,** Filani, J., Swing, E. L. (2013). Growing Your Pain Practice Through Effective Marketing. *Pain Medicine News*, *11(5)*.
- 41. **McJunkin, T. L.,** Carlson, J., Lynch, P. J., Swing, E. L. (2013). The No. 1 Key to Business Development. *Pain Medicine News*, *11(4)*.
- 42. **McJunkin, T. L.,** Lynch, P. J., Deer, T. R., Anderson, J. K., Desai, R. (2012). Regenerative Medicine in Pain Management. *Pain Medicine News*, *10(12)*.
- 43. Bailey, B., **McJunkin, T. L.,** Lynch, P. J., Swing, E. L. (2012). HIPAA: Issues of Health Information Privacy and Security. *Pain Medicine News, JO (]1).*
- 44. Lynch, P. J., **McJunkin, T. L.,** Anderson, J.K., Swing, E. L. (2012). Responsible Use of Opioids for Chronic Pain. *Pain Medicine News*, *10(10)*.
- 45. **McJunkin, T. L.,** Lynch, P. J., & Swing, E. L. (2012). Exceeding Patient Expectations. *Pain Medicine News, 10(9).*
- 46. Lynch, P. J., **McJunkin, T. L.,** Gentile, D. A., & Tapscott, R. L. (2012). Is It Time to Change the Way We Report Pain? *Pain Medicine News, 10(8).*
- 47. McJunkin, T. L., Lynch, P. J., Donley, K. M., Tapscott, R. L. (2012). Hiring an Office Manager: A Checklist. *Pain Medicine News*, *10(6)*.
- Lynch, P. J., McJunkin, T. L., Tapscott, R. L., Madan, T., & Campbell, S. (2012). Discovering Medicine for Your Pain Practice Through Clinical Research, Part 2. *Pain Medicine News*, 10(5).
- Lynch, P. J., McJunkin, T. L., Tapscott, R. L., Madan, T., & Campbell, S. (2012) Discovering Medicine for Your Pain Practice Through Clinical Research, Part 1. *Pain Medicine News*, 10(4), 23-24.
- 50. McJunkin, T. L., Lynch, P. J., & Srejic, E. (2012). Complications of Peripheral Nerve Stimulation: Open Technique, Percutaneous Technique, and Peripheral Nerve Field Stimulation. In M. T. Ransom, J.E. Pope&T.R. Deer (Eds.), *Reducing risks and complications of interventional pain procedures, Vol 5* (pp. 11 - 18). Philadelphia, PA: Elsevier Inc.
- 51. McJunkin, T. L., Lynch, P. J., & Makas, C. (2012). Complications of Therapeutic Minimally Invasive Intradiscal Procedures. In M. T. Ransom, J. E. Pope, & T. R. Deer (Eds.), *Reducing risks and complications of interventional pain procedures, Vol 5* (pp. 41 - 54). Philadelphia, PA: Elsevier Inc.

- Lynch, P. J., McJunkin, T. L., & Srejic, E. (2012). Complications of Percutaneous Vertebral Augmentation: Vertebroplasty and Kyphoplasty. In M. T. Ransom, J.E. Pope, & T. R. Deer (Eds.), *Reducing risks and complications of interventional pain procedures, Vol 5* (pp. 137 - 150). Philadelphia, PA: Elsevier Inc.
- 53. Carlson, J., **McJunkin, T. L.,** Lynch, P. J., & Tapscott, R. L. (2012) Confronting the Brutal Facts: Patient and Employee Satisfaction. *Pain Medicine News*, *10(2)*, 30-31.
- 54. Hogan, P.W., **McJunkin, T. L.,** & Lynch, P. J. (2012). Relationship Development Strategies for Your Pain Practice. *Pain Medicine News*, *10(1)*, 19-20.
- 55. **McJunkin, T. L.,** Lynch, P. J., Gondalia, S., & Tapscott, R.L. (2011). Guidelines to Determine 'Incident To' Billing. *Pain Medicine News, 9(11),* 24-25.
- 56. Lynch, P. J., **McJunkin, T. L.,** & Braunm, R. (2011). What can IT do for your Growing Pain Practice? *Pain Medicine News*, *9*(10), 44-45.
- 57. **McJunkin, T. L.,** Lynch, P. J., Gondalia, S., & Tapscott, R. L. (2011). Roll the DICE: Streamline the Work.flow in your Pain Practice. *Pain Medicine News*, *9(9)*, 46-47.
- McJunkin, T. L., Lynch, P. J., Okagbare, O., & Tapscott, R. L. (2011). Top Five Employment Issues for Pain Management Centers. *Pain Medicine News*, 9(8), 24-25.
- 59. Lynch, P. J., **McJunkin, T. L.,** Sebring, T., & Tapscott, R. L. (2011). Electronic Health Records: A Primer. *Pain Medicine News, 9(7),* 23-24.
- McJunkin, T. L., Lynch, P. J., Tapscott, R. L., & Donley, K. (2011). To Tweet or Not to Tweet: Is Social Media Right for Your Practice? *Pain Medicine News*, 9(6), 18-19.
- Lynch, P. J., McJunkin, T. L., Bailey, B., Tapscott, R. L., & Makas, C. (2011). Legal Implications in Pain Medicine: An Overview of the Federal Stark Law and Anti- Kickback Statute. *Pain Medicine News*, 9(5), 21-22.
- 62. Lynch, P. J., McJunkin, T. L., Eross, E., Gooch, S. and Maloney, J. (2011). Case Report: Successful Epiradicular Peripheral Nerve Stimulation of the C2 Dorsal Root Ganglion for Postherpetic Neuralgia *Neuromodulation: Technology at the Neural Interface, 14(1),* 58-61.

- 63. Gentile, D. A., Woodhouse, J., Lynch, P. J., Maier, J., & **McJunkin, T. L.** (2011). Reliability and Validity of the Global Pain Scale with Chronic Pain Sufferers. *Pain Physician*, 14(1), 61-70.
- 64. **McJunkin, T. L.,** Berardoni, N., Lynch, P. J. & Amrani, J. (2010). An innovative Case Report Detailing the Successful Treatment of Post-Thoracotomy Syndrome with Peripheral Nerve Field Stimulation. *Neuromodulation: Technology at the Neural Interface, 13(4),* 311-314.
- 65. **McJunkin, T. L.,** Wuollet, A. L., & Lynch, P. J. (2009). Case Report: Sacral Nerve Stimulation as a Treatment Modality for Intractable Neuropathic Testicular Pain. *Pain Physician, 12(6),* 991-995.
- 66. **McJµnkin, T. L.,** Lynch, P. J., & Berardoni, N. (2009). Neurostimulation for Pain. *Pain Medicine News*, *7*(*12*), 9-14.

HONORS/AWARDS

Center of Excellence, Sacral Neuromodulation	2023
Global Who's Who in Medicine	2022
Phoenix Award, Arizona Pain Physicians, Business Hall of Fame.	2014-2020
Business Achievement Award, WVIPP	2018
Leading Physicians of the World Award	2011, '15, '18
(Selected for their experience, forward thinking, and highest quality of care)	
Top Doctor 2016, Top Doctor Awards	2016
Vitals Top 10 Arizona Doctors in Arizona – Anesthesiology	2014
Healthgrades's Honor Roll	2012 – 2014
The Great Doctors List – Interventional House of Pain	2014 – Present
Top 10 Pain Management Specialists – RateMDs Doctors You Can Trust, Scottsdale, AZ	2014
Vitals Top 10 Doctor in Metro Phoenix, Anesthesiology	2014
The Best of Arizona Businesses "Pain Management" by Ranking Arizona	2013, 2014
Top Pain Management Specialist in Arizona: Health Tap	2013
Thought Leader in Phoenix Region: Health Tap	2013
Compassionate Doctor Recognition Award voted by patients	2010, 2011
(highest 3% of physicians nationwide recognized)	
The Patients' Choice Award recognition of excellence by patients	2008, '09, '11
(highest 5% of physicians nationwide recognized)	
Center of Excellence recognition by St. Jude Medical	2009
Clinic Intern of the Year awarded by St. Joseph's Internal Medicine Program's staff	2003
Honor Society Member, Oral Roberts University	1994 – 1998

Investigator: Multi-Site Prospective Study: Spinal Cord Stimulation, Efficacy of the SJM Eon-Mini (2006-2007).

Investigator: Phase III Drug Trial for CRPS Pain (2006-2007).

Investigator: Phase II Drug Trial for Lumbar Radiculopathy Pain (2006-2007).

Investigator: Phase I Intrathecal Drug Trial for Refractive Cancer Pain (2006-2007).

Principal Investigator: Multi-Site Study: Partnership for Advancements in Neuromodulation (PAIN): A Prospective Clinical Outcomes Registry (2010-2013).

Principal Investigator: A Randomized, Multi-Center, Double Blind, Placebo-Controlled Phase III Trial to Evaluate the Efficacy, Tolerability and Safety of MRX-7EAT Etodolac- Lidocaine Topical Patch in the Treatment of Pain due to recent onset Supraspinatous Subacromial Tendonitis and/or Subdeltoid Bursitis of the Shoulder (2011-2012)

Principal Investigator: Qualitative Interviews with Patients Diagnosed with Radicular Pain (2012-2013).

Principal Investigator: A Phase II Prospective, Multicenter, Double Blind, Controlled Study Evaluating Safety and Preliminary Efficacy of a Single Injection of Adult Allogenic Mesenchymal Precursor Cells Combined with Hyaluron in Subjects with Chronic Discogenic Lumbar Back Pain (2011-2015).

Principal Investigator: A Randomized, Double Blind, Parallel-Group Study Of Cardiovascular Safety In Osteoarthritis or Rheumatoid Arthritis Patients With or at High Risk for Cardiovascular Disease Comparing Celecoxib With Naproxen and Ibuprofen (2012-2014)

Principal Investigator: Prospective, Multi-Center, Randomized, Double-Blinded, Partial Crossover Study to Assess the Safety and Efficacy of the Bioness® Stimrouter™ Neuromodulation System in the Treatment for Patients with Chronic Pain of Peripheral Nerve Origin (2012-2015)

Principal Investigator: A Randomized Double Blind Placebo Controlled Parallel Group Study of the Efficacy and Safety of Pregabalin (BID) in Subjects with Post-Traumatic Peripheral Neuropathic Pain (2013-2014)

Principal Investigator: A Multicenter, Randomized, Double blind, Controlled, Comparative Study of SI6603 in Patients with Lumbar Disc Herniation (Phase III) (2013-2014)

Principal Investigator: SENSE[™] (Subcutaneous and Epidural Neuromodulation System Evaluation) Study for the Treatment of Chronic Low Back and Leg Pain (2013-2015)

Investigator: Reliability and Validity of the Global Pain Scale Using a Clinical Population from a Large Interventional Pain Practice

Principal Investigator: A Prospective, Multi-center, Randomized Controlled Double- Blind Trial Evaluating the Vertiflex® TotalisTM Direct Decompression System versus a Sham Surgical Procedure in Patients with Lumbar Spinal Stenosis (data collection phase)

Principal Investigator: A Comparative Study Evaluating the St. Jude Medical Invisible Spinal Cord Stimulation Trial System - INSTINCTS.

Principal Investigator: A Prospective, Multicenter, Randomized Double-Blind Crossover Study Examining the Safety and Effectiveness of Using Spinal Cord Stimulation Incorporating Feedback to Treat patients with Chronic Pain of the Trunk and/or Limbs in an Extended Trial. Saluda Medical

Principal Investigator: A Randomized, Double-Blind Trial Investigating the Efficacy and Safety of Intravenous Neridronic Acid in Subjects with Complex Regional Pain Syndrome Type I (CPRS-I)

Principal Investigator: Outcomes of Single Injections of FloGraft Therapy, Autologous Stem Cells, or Platelet Rich Plasma for the Treatment of Pain in the Lumbar Facet Joints, Sacroiliac Joints, Upper Extremity Joints, and Lower Extremity Joints

Principal Investigator: High-Frequency Nerve Block for Post-Amputation Pain: A Pivotal Study. Neuros Medical.

Principal Investigator: Phase III Trial of Rexlemestrocel-L (MSC-06 Mesenchymal Stem Cells) for the Treatment of Discogenic Lower Back Pain. Mesoblast

A Multi-Center, Prospective, Clinical Trial of the XXX Spinal Cord Stimulation (SCS) System in the Treatment of Chronic Pain of the Upper Extremities

A Prospective, Multicenter, Randomized, Double-Blinded, Sham-Controlled Study to Evaluate the Efficacy and Safety of Clonidine Micropellets for the Treatment of Pain Associated with Lumbosacral Radiculopathy in Adults: RePRIEVE-CM (achieving Radicular Pain RelIEF Via Epidural Injection of Clonidine Micropellets)

Title: BENEFIT - 02 Study - Study Design: Prospective, multi-center, randomized, parallel assignment, single-blind, interventional feasibility study.

Postmarket Registry for Evaluation of the Superion Spacer (PRESS Registry)

VOLUNTEER EXPEREINCE

Medical Mission Trip to Guatemala (Summer) Co-Founder and Chairman, <i>Arizona Pain Foundation</i> : Non-Profit Organization to	2024
help the poor and suffering	2009 – Present
Co-Chair, Chi Alpha National Foundation Advancement Group	2015 – 2018
Co-Sponsored, Stop the Traffic 5K Event for sex trafficking victims	2013
Relief Support for Alabama tornado victims	2011
Sponsored and participated in Christmas Party for Immigrants and	
Children from Around the World	2010 – 2020
Support mission trip to South America	2010
Sponsored and participated in Christmas Party for Immigrants and	
Children from Around the World	2009
Arizona Pain Foundation Volunteer, Sunshine Acres Children's Home Circus Event	2009
Arizona Pain Foundation Medical Mission Trip Leader to Nogales, AZ	2009
Catholic Charity Refugee Fundraiser	2009
Sponsored Christmas Party for Burmese Immigrants	2008
Co-Director, Chi Alpha Campus Ministry at Texas Tech	2006 – 2007
Leader, CMDA, Medical Mission Trip to Bolivia	2002
Member, CMDA, Medical Mission Trip to Bolivia	2001
Member, Relief Team to Orphanage in Juarez, Mexico	1998
Leader, Medical and Dental Mission Trip to Nepal	1997
Leader, Medical Mission Trip to Cameroon, Africa	1996
Member, Mission Trip to Chad and Cameroon, Africa	1996
Big Brother to "Jason" in Tulsa, OK	1996 – 1998
National Ski Patrol, Sunrise Ski Resort, AZ	1992 – 1996

LICENSURE/CERTIFICATIONS

Medical License, State of Arizona Medical License, State of California Medical License, State of Colorado Medical License, State of New Mexico Medical License, State of Nevada Medical License, State of Texas DEA Licensed, State of Arizona Subspecialty Board Certification: Pain Management Board Certification and Diplomate, American Board of Anesthesiology Pain Medicine, ABA Written Exam Anesthesiology Oral Board Examination Anesthesiology Written Board Examination	Active Active Active Active Active Active 2007 –Present 2007 –Present 2007 2007 2007
	Active
Subspecialty Board Certification: Pain Management	2007 – Present
Board Certification and Diplomate, American Board of Anesthesiology	2007 – Present
Pain Medicine, ABA Written Exam	2007
Anesthesiology Oral Board Examination	2007
Anesthesiology Written Board Examination	2006
USMLE Steps 1-3	2000 – 2005
Advanced Cardiac Life Support	2001 – Present
Basic Cardiac Life Support	1992 – 2001
Emergency Medical Technician Certification	1998 – 1998
Winter Emergency Care Certification	1992 – 1996

National Ski Patrol Active Certification

1992 - 1996

PROFESSIONAL ORGANIZATIONS / AFFFILIATIONS

American Society of Pain and Neuroscience Society (ASPN), Board of Directors	2018 – Present
American Society of Pain and Neuroscience Society (ASPN), Leadership Council	2020 – Present
American Association of Pain Management in Ultrasound (AAPMU)	2012
American Academy of Pain Management (AAPM)	2012
Arizona Medical Association	2011 – Present
Member at Large, Arizona Society of Interventional Pain Physicians (AZIPP)	2010 – Present
North American Neuromodulation Society (NANS)	2007 – Present
American Society of Interventional Pain Physicians (ASIPP)	2007 – Present
Interventional Spine Intervention Society	2008 – Present
American Society of Anesthesiologist (ASA)	2007 – Present
Christian Medical and Dental Association (CMDA)	2004 – Present

EDUCATIONAL MEETINGS

ASPN Pain 2023, Faculty and Moderator	2024
ASPN Pain 2023, Faculty	2023
ASPN Pain 2022, Faculty	2022
ASPN Pain 2021, Faculty	2021
ASPN Pain 2020, Faculty	2020
Faculty, American Society of Pain and Neuroscience, Pain	2019
Faculty, American Society of Pain and Neuroscience Emerging Therapies Lab	2019
North American Neuromodulation Society Meeting, NV	2019
Faculty, Pain 2018 WVIPP Conference	2018
Faculty, American Society of Spine Radiology Meeting	2018
Faculty, Pain 2017 WVIPP Conference	2017
Faculty, Pain 2016 WVIPP Conference	2016
Faculty, DRG Academy, St. Jude Medical, Dallas, TX	2016
DRG Master Physician Course, St. Jude Medical	2016
SJM Faculty Presenter, North American Neuromodulation Society Meeting, NV	2016
Course Director, St. Jude Medical Spinal Cord Stimulation, Houston, TX	2016
Course Director, Stryker IVS, Houston, TX	2016
SJM Faculty Presenter, North American Neuromodulation Society Meeting, NV	2015
Faculty, NSPC Pain Management Consortium, Washington, DC	2015
Spinal Intervention Society Meeting, Las Vegas, NV	2015
SJM Faculty Presenter, North American Neuromodulation Society Meeting, NV	2014
Faculty, NSPC Pain Management Consortium, Washington, DC	2014
Faculty, Axonics Medical Advisory Meeting, Chicago, IL	2014
Texas Tech Annual Pain Symposium, Lubbock, TX	2014

Faculty, Texas Pain Society, Austin, TX	2014
SJM Faculty Presenter, North American Neuromodulation Society Meeting, NV	2013
Faculty, West Virginia Interventional Pain Physician Society Meeting, Palm Beach	, FL 2013
Faculty, Advancing Neuromodulation, SJM, San Diego, CA	2013
Faculty, SAMBA National Meeting, Phoenix, AZ	2013
SJM Faculty Presenter, North American Neuromodulation Society Meeting, NV	2012
Faculty, St. Jude Medical Foundation for Fellows Training Course, San Francisco, G	CA 2012
American Association of Pain Management in Ultrasound Meeting, , AZ	2012
Presenter, North American Neuromodulation Society Meeting, NV	2011
Faculty, West Virginia Interventional Pain Physician Society Meeting, CA	2011
Presenter, American Academy of Pain Medicine National Meeting, Washington, I	DC 2011
Presenter, North American Neuromodulation Society Meeting, Las Vegas, NV	2010
American Society of Regional Anesthesia and Pain National Meeting, Phoenix, AZ	2010
Presenter, North American Neuromodulation Society Meeting, Las Vegas, NV	2009
Texas Tech Annual Pain Symposium, Lubbock, TX	2009
Stryker Radiofrequency and Vertebroplasty Course, Phoenix, AZ	2009
North American Neuromodulation Society Meeting, Las Vegas, NV	2008
St. Jude Medical Advanced Physician's Spinal Cord Stimulation Course, Phoenix, A	AZ 2008
Texas Tech Annual Pain Symposium, Lubbock, TX	2008
Stryker Radiofrequency and Vertebroplasty Course, Phoenix, AZ	2008
Texas Tech Annual Pain Symposium, Lubbock, TX	2007
Advanced Bionics Spinal Cord Stimulation Course	2006
Stryker Vertebroplasty Course, Baltimore, MD	2006
Texas Tech Annual Pain Symposium, Lubbock, TX	2006
Cleveland Clinic's SJM Spinal Cord Stimulation Course	2005
Cleveland Clinic's Annual Pain Symposium, Orlando, FL	2005
Oklahoma Representative at CMDA National Meeting, Bristol, TN	2000

PRESENTATIONS AND LECTURES

Director, SCS and Peripheral Neuropathy: Nevro. Arizona	2024
Television Guest: Channel 3 AZ: SNM	2024
Faculty, SCS In Your Practice: Nevro	2024
Bladder Health Solutions: Multi-lecture series	2023 -2024
Television Guest: Your Life from A to Z: Bladder Relief with Dr. McJunkin & Julie	2023
Faculty, Peripheral Neuropathy Relief: Nevro. Arizona, California	2023
Faculty, Peripheral Neuropathy Relief: Nevro.	2022
Colorado Springs, Pueblo, New Mexico, Yuma, Scottsdale, Phoenix	2022
Faculty, ASPN: Sacroiliac Joint Fusion	2021
Director, Nevro: New Treatment Option for Pain from Painful Diabetic Neuropathy	2021
Faculty, Nevro: Practical Telemedicine	2020
Faculty, National Business of Pain, Nevro Fellows Course. California	2020
Poster, NANS: SCS at 10 kHz for Chronic Focal Neuropathic Post-Surgical Pain	2019
Poster, NANS: Surgical Implant Technique for Novel, Miniaturized SCS System	2019

Poster, NANS: Clinically Relevant SCS Parameters on Patient Perception	2019
Faculty, Introduction to Neuromodulation, Nevro Fellows Course. Boston	2019
Faculty, Early Practice Leaders Meeting, Nevro. California	2018
Presentation, Advancing Neuromodulation, Nevro. Missouri	2018
Presentation, Nevro Efficacy and Research. Napa Pain Meeting	2018
Director, Nevro Cadaver Course and Presentation. New Mexico	2018
Faculty and Director, Nevro Educational Summit. Phoenix	2018
Faculty and Presenter, Pain 2018 Conference, Miami, FL	2018
Faculty, World Institute of Pain Nevro Panel. Ireland	2018
Poster Presentation, World Institute of Pain, Ireland	2018
	2018
Faculty, Nevro, Post-Fellowship Lecture.	
Faculty, Nevro, MD Summit Event, San Diego, CA	2018
Faculty, American Society of Spine Radiology Meeting. Lecture: DRG Therapy.	2018
Faculty, Vertiflex Proctor Training Course, Miami, FL	2018
Faculty, St. Jude Medical, Fellow's Course, Phoenix, AZ	2017
Faculty and Presenter, Pain 2017 Conference, Miami, FL	2017
Faculty, DRG Proctor Training Lab	2016
Faculty, St. Jude Medical, Cadaver Course	2016
Faculty and Presenter, Pain 2016 Conference. Vertebral Augmentation, Safety	2016
Prescribing Opioids, and CDC Opioid Guideline Review.	2016
Faculty, DRG Academy. L4 and L5 DRG Placement.	2016
Guest Lecturer: Impact of Opioids in Arizona to Governor's Task Force	2016
Faculty, St. Jude Medical, Optimizing Patient Outcomes	2015
Faculty, St. Jude Medical, NANS Expert in the Booth	2015
Faculty, St. Jude Medical, Fellow's Course, Redlands, CA	2015
Faculty, Stryker IVS Course, Henderson, NV	2015
Faculty, SJM TINS, Optimizing Patient Outcomes in Chronic Pain, Las Vegas, NV	2015
Faculty, St. Jude Medical Radiofrequency Advisory Board, Chicago, IL	2015
Roundtable Discussion, Hooked Next Steps: Curbing Heroin and Opioid Abuse	2015
Course Director, Stryker IVS Course, Long Beach, CA	2015
Course Director, Stryker IVS Course, Denver, CO	2015
Course Director, St. Jude Medical Spinal Cord Stimulation Course, Scottsdale, A	
Course Director, Stryker may Clinic Fellow's Course, Rochester, MN	2015
Faculty, Stryker IVS National Product Training Course, Tampa, FL	2015
Faculty, St. Jude Medical, NANS Fellow Dinner	
	2014
Faculty, St. Jude Medical, NANS Expert in the Booth	2014
Faculty, St. Jude Medical Neuromodulation 201 Fellow's Course, Plano, TX	2014
Faculty, St. Jude Medical Neuromodulation 101 Fellow's Course, Los Angeles, C	
Faculty, Stryker IVS National Lab, Burr Ridge, IL	2014
Faculty, Medtronic Interventional Product Development Focus Meeting, Sunny	
Course Director, Stryker Physician Laboratory Event, Cleveland Clinic, OH	2014
Faculty, Texas Tech Pain Meeting. Lectures: ICD-10 for Pain Physicians,	2014
New Innovations in Pain Medicine	
Faculty, Stryker IVS Course, Memphis, TN	2014
Faculty, Stryker IVS Course, Tampa, FL	2014

Guest Lecturer, Arizona Science Center,	
Lecture: The Pain Fighter: Medical Innovations and Regenerative Medicine	2014
Faculty, Texas Pain Society, Austin, TX. Lecture: <i>Preparing for ICD-10</i>	2014
Faculty, Stryker National Sales Meeting. Lecture: Advanced RFA Treatments	2014
Neuromodulation Academy Physician Instructor for	
St. Jude Medical: Physician-to-Physician Training; monthly	2014
Faculty, Advancing Neuromodulation Course, San Diego, CA	2013
Principal Investigator Meeting, SJM SENSE study, Dallas, TX	2013
Consultant, SJM spinal cord stimulation electrical lead development and steering,	
Dallas and Phoenix	2013
Lecture: Practice Management Pearls. SAMBA National Meeting, Phoenix, AZ	2013
Neuromodulation Academy Physician Instructor for St. Jude Medical: Physician-to-Phys	
Training; Bimonthly. Lecture: The Future of Pain Medicine. SJM National Meeting	2013
Medical Student Lecture: Risks of Opioid Medications	
University of Arizona, College of Medicine	2013
Television Guest: Stem Cells for Chronic Pain	2013
Faculty Pain: Chronic Pain Treatments. The Power of Pain Foundation	2013
Faculty, Neuromodulation Academy Fellows Course, San Francisco, CA	2012
Neuromodulation Academy Physician Instructor for St. Jude Medical: Physician-to-Phys	
Training: Bimonthly	2012
Television Guest: ABC 15. Back Pain Breakthrough: stem cells	2012
Faculty, Lecture, Treating Neuropathic Extremity Pain.	
SuperFeet National Podiatry Meeting, Phoenix, AZ	2012
AAPM Membership Task Force	2012
Presentation at NANS: Assessing the Impact of Positional	
Changes and Movement in Spinal Cord Stimulation Patients	2011
Faculty, SJM Neuromodulation Academy Fellows Course, Boston , MA	2011
Faculty and Presentation at West Virginia Interventional Pain Meeting:	
Live Procedure Demonstration: Sphenopalatine Ganglion Nerve Block	2011
Presentation at American Academy of Pain Management:	
Washington, DC.: A Novel Placement of IPG for Lower Extremity PNS	2011
Neuromodulation Academy Physician Instructor for	
St. Jude Medical: Physician-to-Physician Training; Bimonthly	2011
Guest Appearance: Arizona AM Radio and TV. Dealing with Chronic Pain	2011
Faculty Lecture, Treating Neuropathic Extremity Pain,	
Desert Foot National Podiatry Meeting, Scottsdale, AZ	2010
Neuromodulation Academy Physician Instructor for St. Jude Medical:	
Physician-to-Physician Training; Bimonthly	2010
Faculty, Neuromodulation Academy Fellows Course: Chicago, Baltimore,	
New Orleans, and Dallas	2010
St. Jude Medical: Physician Webcast Teaching, quarterly	2010
By Invitation, Presentation to Noridian, Medicare: Vertebroplasty is Effective for	
Vertebral Compression Fractures	2010
North American Neuromodulation Society Presentation: Peripheral	
Nerve Stimulation for Brachial Plexus Avulsion	2010

Faculty Lecture: Advanced Chronic Pain Treatment. The Power of Pain Found	ation 2010
Radio Show Guest: KFNX Talk Radio 1100 AM; Interventional Pain Treatment	
Television Guest: Your Life from A to Z. Interventional Pain Treatments. Quar	terly 2010
NANS: Neuromodulation for Testicular Pain	2009
North American Neuromodulation Society Presentation:	
Peripheral Nerve Field Stimulation for Post-thoracotomy Syndrome	2009
Electrical Stimulation of Pain Presentation: TENS and Spinal Cord Stimulation	2009
Neuromodulation Academy Physician Instructor for St. Jude Medical:	
Physician-to-Physician Training	2009
Television Guest: Your Life from A to Z. Chronic Pain Treatments with Dr. Mc.	Iunkin 2009
Television Guest: Your Life from A to Z. Vertebroplasty with Dr. McJunkin	2009
Television Guest: Chiropractic Medicine and Alternative Treatment	s2009
Physician Instructor for Boston Scientific Spinal Cord Stimulation Course: NV	2008
Television Guest: Your Life from A to Z. Radiofrequency Ablation with Dr. Mc.	Junkin 2008
Television Guest: Your Life from A to Z. Spinal Cord Stimulation with Dr. McJu	inkin 2008
Author Multiple Chapters: A Comprehensive Approach to Pain Management	2007 –2021
NANS Presentation: Eon-Mini Stimulation Clinical Study	2008
Lecture: Lower Extremity Nerve Blocks, Mayo Clinic	2008
Lecture: Vertebroplasty for Vertebral Compression Fractures	2008
Lecture: Osteoporosis – Diagnosis and Treatment	2008
Lecture: Medial Branch Radiofrequency Efficacy	2008
Lecture: Spinal Cord Stimulation in the Podiatry Patient	2008
Grand Rounds: Complementary and Alternative Pain	2007
Lecture: Cervical Medial Branch Block	2007
Lecture: Intradiscal Procedures	2006
Grand Rounds: Efficacy of Spinal Cord Stimulation	2006
Grand Rounds: Massive Blood Loss in a Neonate	2006
Lecture: E.X.I.T. Procedure for Neonate with Massive Head and Neck Teraton	
Lecture: Mental Status Changes after Neurosurgery	2005
Grand Rounds: Congestive Heart Failure	2004
Dissertation: Leprosy: The Historical and Current Diagnosis and Treatments	1998

EXPERT WITNESS TRIAL AND DEPOSITION LIST

1.	2015: Trial Expert Witness:	Jacob Amrani, Plaintiff, v. United States of America, Defendant
2.	2021: Deposition Expert Witness:	Paula Long, Plaintiff, v. Olivia Jane Robinson, Defendant
3.	2022: Deposition Expert Witness:	Pinto Pais, Plaintiff, v. Barker, Defendant
4.	2022: Deposition Expert Witness:	Anthony Casteneda, Plaintiff, v.

Eastern Railway Company, Defendant

5.	2023: Deposition Expert Witness:	Shawn Maywald, Plaintiff, v. Toyota Motor Corporation, Defendant
6.	2023: Deposition Expert Witness:	Angella Pappas, Plaintiff, v. Liberty Mutual, Defendant
7.	2023: Deposition Expert Witness:	Jeffrey Juraska, Plaintiff, v. GEICO, Defendant
8.	2024: Trial:	Paula Long, Plaintiff, v. Olivia Jane Robinson, Defendant