

Curriculum Vitae

**Personal Data**

Name: Denis G. Patterson, DO  
Email: patterson@nvadvancedpain.com

**Employment Data**

Company: Nevada Advanced Pain Specialists  
Title: President  
Dates: March 28, 2009 – Present  
Address: 5578 Longley Lane  
Reno, NV 89511  
Phone: (775) 284-8650  
Fax: (775) 284-8654  
Email: patterson@nvadvancedpain.com

Company: SpineNevada  
Title: Director of Non-operative Care  
Dates: August 2007 – March 27, 2009  
Address: 2845 E. Prater Way, Suite #204  
Sparks, NV 89434  
Phone: (775) 348-8800

**Professional Appointments**

Institution: Summit Surgery Center at Saint Mary's Galena  
Title: President, Board of Directors  
Dates: October 2009 – June 2013  
Address: 18653 Wedge Pkwy #170  
Reno, NV 89511  
Phone: (775) 674-5200  
Fax: (775) 674-5228

Institution: Northern Nevada Medical Center  
Title: Medical Director of the Pain Management Center  
Dates: June 2012 – July 2022  
Address: 2385 E Prater Way, Suite 102  
Sparks, Nevada 89434  
Phone: (775) 284-8650  
Fax: (775) 284-8654

Institution: University of Nevada School of Medicine  
Title: Faculty in the ECHO Pain Management and Addiction Clinic  
Dates: February 2015 – Present

Address: 411 West Second Street  
Reno, NV 89503  
Phone: (775) 682-8476

Institution: MD Spine Solutions LLC  
Title: Medical Director of RxIGHT Pharmacogenetics Program  
Dates: November 2015 – November 2021  
Address: 10715 Double R. Blvd  
Reno, NV 89521  
Phone: (775) 391-5221  
Fax: (775) 737-9133

Institution: Nevada Advanced Pain Surgical Center LLC  
Title: President, Board of Directors  
Dates: December 2015 – December 2018  
Address: 10719 Double R. Blvd  
Reno, NV 89521  
Phone: (775) 284-7467  
Fax: (775) 295-4844

Institution: University of Nevada School of Medicine  
Title: Site Director for Internal Medicine Residency Program  
Dates: April 2018 – Present  
Address: 5578 Longley Lane  
Reno, NV 89511  
Phone: (775) 284-8650  
Fax: (775) 284-8654

Institution: Pacific Spine & Pain Society  
Title: Board of Directors, Member  
Dates: May 2020 – September 2022

Institution: Pacific Spine & Pain Society  
Title: Executive Board of Directors, Treasurer  
Dates: September 2021 – September 2023

Institution: Pacific Spine & Pain Society  
Title: Executive Board of Directors, President Elect  
Dates: September 2023 – Present

### **Academic Appointments**

Institution: Michigan State University College of Osteopathic Medicine  
Title: Clinical Assistant Professor  
Dates: November 2010 – July 1, 2013

Institution: Touro University Nevada College of Osteopathic Medicine  
Title: Clinical Assistant Professor  
Dates: October 1, 2015 – October 1, 2019

**Board Certification**

American Board of Physical Medicine and Rehabilitation  
Written Examination Passed 8/2006  
Oral Examination Passed 5/2007  
Re-Certification Examination Passed 2/2017

American Board of Physical Medicine and Rehabilitation, Pain Medicine  
Written Examination Passed 9/2007  
Re-Certification Examination Passed 9/2017

**Education**

**Fellowship** July, 2006 – June, 2007  
Emory University  
Atlanta, GA  
Pain Fellowship  
Section of Physical Medicine and Rehabilitation

**Residency** July, 2003 – June 2006  
Mayo Clinic Graduate School of Medicine  
Rochester, MN  
Section of Physical Medicine and Rehabilitation

**Internship** July, 2002- June, 2003  
Mount Clemens General Hospital  
Mount Clemens, MI  
Traditional Rotating Osteopathic Internship

**Graduate** August, 1998- May, 2002  
Michigan State University College of Osteopathic Medicine  
East Lansing, MI  
Degree: D.O.

**Undergraduate** August, 1993- May, 1997  
University of Colorado at Boulder  
Boulder, CO  
Degree: B.A. Molecular, Cellular, Developmental Biology

**High School** August, 1989- May, 1993  
Denver South High School  
Denver, CO

Diploma

### **Honors and Awards**

- Professional** 2023 Clinical Excellence Award by the American Society of Pain & Neuroscience (ASPN)
- 2021 Northern Nevada Innovator of the Year by Nevada Business Magazine
- 2013 Top 25 Physician in Northern Nevada by Nevada Business Magazine
- 2013 Achieved the JAHCO Gold Seal of Approval of Low Back Pain for Northern Nevada Medical Center while acting as the Medical Director of the Pain Center. We are the first and only Center in the nation to achieve this certification
- 2012 Top 25 Physician in Northern Nevada by Nevada Business Magazine
- Residency** Resident Physician Council Liaison to PASSOR for the American Academy of Physical Medicine and Rehabilitation October 2004- October 2005
- Graduate** Vice President of the Student Osteopathic Surgical Association August, 1999- August, 2000
- Undergraduate** Deans List, University of Colorado at Boulder, 1993-1997

### **Professional Organizations**

American Medical Association, Fellow Member  
American Academy of Physical Medicine and Rehabilitation, Fellow Member  
International Spine Interventional Society, Fellow Member  
North American Neuromodulation Society, Fellow Member  
Internal Neuromodulation Society, Fellow Member

### **Committees/Teaching**

Anatomy Tutor for Medical Students (1<sup>st</sup> year)  
Fall 1999

### **Consulting Relationships**

Abbott Medical/St Jude Medical October, 2013 – Present  
AIS January, 2019 – Present

Allergan February, 2012 – Present  
Amgen November, 2017 – Present  
Aurora Spine March, 2022 - Present  
CornerLoc January, 2019 – Present  
Ethos Laboratories June, 2021 - Present  
Flowonix August, 2017 – Present  
Lundbeck August, 2020 – Present  
PainTEQ November 2023 – Present  
Pajunk Medical November 2021 - Present  
Saluda September, 2018 – Present  
Spark Biomedical June, 2020 – Present  
Vertos Medical January 2020 – Present  
Vivex Biologics March 2021 - Present

### **Research Trials**

Principal Investigator: Nuvectra Corp., Algovita Post-Market Clinical Investigational Plan: A prospective, multi-center, single arm, non-randomized observational, post-market study obtaining real-world clinical outcome data for the Algovita Spinal Cord Stimulation System when used, on-label, according to the applicable indications for use.

Principal Investigator: BIOTRONIK Inc., BENEFIT-02 Study: A prospective, multicenter, randomized, parallel-assignment, single-blind, interventional feasibility study investigation the effects of two study spinal cord stimulation (SCS) therapies on subjected reported pain and paresthesia perception.

Principal Investigator: Vertiflex Press Registry: Post-marketing Superior Spacer Registry for Evaluation of Superior Spacer.

Principal Investigator: Nevro Corp., PDN1: A Post-Market, Multicenter, Prospective, Randomized Clinical Trial Comparing 10 kHz Spinal Cord Stimulation (HF10™ Therapy) Combined with Conventional Medical Management to Conventional Medical Management Alone in the Treatment of Chronic, Intractable, Neuropathic Limb Pain

Principal Investigator: St Jude Medical, Inc./Abbott Medical, BurstDR™ microDosing stimuLation in De-novo patients (BOLD). Study to evaluate the efficacy of BurstDR™ microdosing stimulation in patients with chronic intractable back and/or leg pain with no prior history of SCS therapy.

Principal Investigator: St Jude Medical, Inc./Abbott Medical, TARGET: A Post-Approval Study to Evaluate Targeted SCS (DRG) Stimulation for the management of Moderate to Severe Chronic, Intractable, Pain of the Lower Limbs due to CRPS types I and II.

Principal Investigator: St Jude Medical, Inc./Abbott Medical, DELIVERY: Randomized, controlled, single blinded, prospective, multicenter study evaluating the effect of a multi-therapy trial system on neurostimulation trial outcomes (DELIVERY PMS) study.

Principal Investigator: Abbott Medical, PROLONG: A prospective, Multicenter, Open-Label, Post-Market Study involving IPG revisions from non-BurstDR™ capable IPG's, to BurstDR™ capable, Abbott Medical IPG's due to loss of therapeutic effect in order to evaluate the efficacy of Abbott's neurostimulators in restoring therapeutic benefit from neuromodulation therapy.

Principal Investigator: Abbott Medical, REALITY: A post-market, prospective, open-label, non-randomized, multi-center study conducted to gain an understanding of how Abbott's neurostimulation systems are being used in the real-world setting. It will serve the dual purpose of collecting long-term safety and effectiveness of these devices, and obtaining information about the different patient populations who are using them.

Principal Investigator: Abbott Medical, REALITY Sub-Study: External sensing for chronic pain therapy for patients with implanted spinal cord stimulation devices: Feasibility Study. The primary objective of this Sub-study is to determine the feasibility of measuring physiologic and behavioral markers derived from smartwatch recordings to characterize patient experience from baseline to 6 months post-implant.

Principal Investigator: Abbott Medical, DISTINCT: Dorsal spinal cord Stimulation versus medical management for the treatment of low back pain. This study will compare Spinal Cord Stimulation using BurstDR™ to conventional medical management (CMM) for patients with non-surgical chronic low back pain.

Principal Investigator: Abbott Medical, ROSTRA: Real-World Outcomes Study on Subjects Treated with Radiofrequency Ablation. An international, prospective, non-randomized, single-arm, multi-center, observational, post-market study. The objective of this study is to collect real-world safety and effectiveness data on Abbott's IonicRF™ Generator and compatible accessories.

Principal Investigator: Evolve Restorative Center, PROSPER: A Post-market, Randomized, Controlled, Prospective Study Evaluating Intrathecal Morphine (IT) versus Conventional Medical Management (CMM) in the Non-cancer, Refractory, Chronic Pain Population (PROSPER).

Principal Investigator: Clarity Research and Consulting, LLC., OPTIMA-G: Observational Study (Observing Pain Transdermal Treatments – Improving and Managing All GI Symptoms).

Principal Investigator: STIMPACT: A study determining if Pain Impact Scores (PIS) have a predictive value for the success of neurostimulation trials and outcomes, and to prove non-inferiority of the PIS against traditional measures of neurostimulation success.

Principal Investigator: Saluda Medical Americas., ECAP Study: A prospective, multicenter, single-arm study examining ECAP-controlled, closed-loop stimulation with the Evoke Spinal Cord Stimulator System to treat patients with chronic pain of the trunk and/or limbs. Saluda Medical's neurostimulation system will be used in the real-world setting. It

will serve the dual purpose of collecting long-term safety and effectiveness of these devices, and obtaining information about the different patient populations who are using them.

Principal Investigator: Aurora Spine., REFINE Study: A Prospective, observational, open label, non-randomized, multi-center study measuring functional outcomes in a novel interspinous fusion device in patients with low back pain. Aurora Spine's Aurora ZIP interspinous fusion device will be used in the real-world setting. It will serve the dual purpose of collecting long-term safety and effectiveness of the fusion device, and obtaining information about the different patient populations implanted.

Principal Investigator: SI-Bone., STACI Study: A prospective, multicenter, single arm, post-market study examining the treatment of sacroiliac joint dysfunction with the iFuse TORQ Implant System. SI-Bone's iFuse TORQ implants will be used in the real-world setting. It will serve the dual purpose of collecting long-term safety and effectiveness of the implants, and obtaining information about the different patient populations implanted.

Medical Monitor: CornerLoc., SPARTAN Study: A multicenter, prospective, post-market surveillance study examining the treatment of sacroiliac joint disease using the TransLoc 3D Sacroiliac Joint Fusion System. CornerLoc's fusion device will be used in the real-world setting. It will serve the dual purpose of collecting long-term safety and effectiveness of the fusion device, and obtaining information about the different patient populations implanted.

Principal Investigator: Nevada Advanced Pain Specialists., RETURN Study: An unblinded, non-randomized, prospective, single center study examining the effect of the Invisible Trial System BurstDR spinal cord stimulation on pain and function in patients with chronic intractable pain of the lower limbs. Abbott's neurostimulation system will be used in the real-world setting. It will serve the dual purpose of collecting long-term safety and effectiveness of these devices, and obtaining information about the different patient populations who are using them.

## **Publications**

Steve J. Wisniewski, MD<sup>a</sup>., Jay Smith, MD<sup>b</sup>., **Denis G. Patterson, DO, <sup>c</sup>.**, Stephen W. Carmichael, PhD<sup>d</sup>., Wojciech Pawlina, MD<sup>e</sup>. **Ultrasound-guided versus Nonguided Tibiotalar Joint and Sinus Tarsi Injections: A Cadaveric Study.** PM&R Vol. 2, Issue 4, April 2010, Pages 277-281

Deer, T., Pope, J., Lamer, T., Grider, J., Provenzano, D., Lubenow, T., FitzGerald, J., Hunter, C., Falowski, S., Sayed, D., Baranidharan, G., Patel, N., Davis, T., Green, A., Pajuelo, A., Epstein, L., Harned, M., Liem, L., Christo, P., MD, Chakravarthy, K., Gilmore, C., Huygen, F., Lee, E., Metha, P., Nijhuis, H., **Patterson, D.**, Petersen, E., Pilitsis, J., Rowe, J., Rupert, M., Skaribas, I., Sweet, J., Verrills, P., Wilson, D., Levy, R., Mekhail, N.. **The Neuromodulation Appropriateness Consensus Committee on Best Practices for Dorsal Root Ganglion Stimulation.** *Neuromodulation: Technology at the Neural Interface* Vol. (Issue), pages, 2018

Deer, T., **Patterson, D.**, Baksh, J., Pope, J., Mehta, P., Raza, A., Agnesi, F., Chakravarthy, K.. **Novel Intermittent Dosing Burst Paradigm in Spinal Cord Stimulation.** *Neuromodulation: Technology at the Neural Interface* Vol 23 (Issue 2), pages, 2020

Corey W. Hunter, MD., Jonathan Carlson, MD., Ajax Yang, MD., **Denis Patterson, DO.**, Ben Lowry, MD., Pankaj Mehta, MD., Jeffery Rowe, MD., and Timothy Deer, MD. **BURST(able): A Retrospective, Multicenter Study Examining the Impact of Spinal Cord Stimulation with Burst on Pain and Opioid Consumption in the Setting of Salvage Treatment and “Upgrade”.** *Pain Physician* 2020; 23: E643-E658

Steven Falowski, MD., Dawood Sayed, MD., Jason Pope, MD., **Denis Patterson, DO.**, Michael Fishman, MD., Mayank Gupta, MD., Pankaj Mehta, MD. **A Review and Algorithm in the Diagnosis and Treatment of Sacroiliac Joint Pain.** *Journal of Pain Research* 2020; 13: 3337–3348

Erika A. Petersen, MD; Thomas G. Stauss, MD; James A. Scowcroft, MD; Elizabeth S. Brooks, PhD; Judith L. White, MD; Shawn M. Sills, MD; Kasra Amirdelfan, MD; Maged N. Guirguis, MD; Jijun Xu, MD, PhD; Cong Yu, MD; Ali Nairizi, MD; **Denis G. Patterson, DO**; Kostandinos C. Tsoulfas, MD; Michael J. Creamer, DO; Vincent Galan, MD; Richard H. Bundschu, MD; Christopher A. Paul, MD; Neel D. Mehta, MD; Heejung Choi, MD; Dawood Sayed, MD; Shivanand P. Lad, MD, PhD; David J. DiBenedetto, MD; Khalid A. Sethi, MD; Johnathan H. Goree, MD; Matthew T. Bennett, MD; Nathan J. Harrison, MD; Atef F. Israel, MD; Paul Chang, MD; Paul W. Wu, MD; Gennady Gekht, MD; Charles E. Argoff, MD; Christian E. Nasr, MD; Rod S. Taylor, PhD; Jeyakumar Subbaroyan, PhD; Bradford E. Gliner, MS; David L. Caraway, MD, PhD; Nagy A. Mekhail, MD, PhD. **Effect of High-frequency (10-kHz) Spinal Cord Stimulation in Patients With Painful Diabetic Neuropathy: A Randomized Clinical Trial.** *Jamaneurol*.2021.0538

Deer T., Wilson D., Schultz D., Falowski S., Tavel E., Moore G., Heros R., **Patterson D.**, Fahey M., Capobianco R., Anitescu M. 2021. **Ultra-Low Energy Cycled Burst Spinal Cord Stimulation Yields Robust Outcomes in Pain, Function, and Affective Domains: A Subanalysis From Two Prospective, Multicenter, International Clinical Trials.** *Neuromodulation* 2021.



Lee DW, **Patterson DG**, Sayed D. **Review of Current Evidence for Minimally Invasive Posterior Sacroiliac Joint Fusion.** Int J Spine Surg. 2021 (3):514-524.

Ajay Antony, Miguel Attias, Nomen Azeem, Douglas P. Beall, MD., Jordan E. Brasuell, BS., Alvro E. Bravo, MD., Krishnan Chakravarthy, Pooja Chopra, Jeffery Ciccone, Timothy Davis, Timothy R. Deer, James Deering, John DiMuro, Dana Dunleavy, MD., Alyson Engle, Alexander Escobar, Michael Esposito, Andrew W. Favre, BS., Stanely Golovac, Priyanka Ghosh, Anthony Giuffrida, Jonathan M. Hagedorn, Michael Hanes, Robert Heros, MD., Navdeep Jassal, Jack W. Jennings, MD, Phd., Jeonardo Kapural, Majid Khan, MD., Ali A. Khan, BS., Brooks M. Koenig, BS., Lisa R. Kroopf, Eric Lee, Mark Malinowski, Amela Minerali, Ramana Naidu, Shachi Patel, **Dennis G. Patterson**, Kailash Pendem, Jay Shah, Sean M. Tutton, MD., Farzan Vahedifard, Ali Valimahomed, Jackie Weisbein, Edward S. Yoon, MD. **Essentials of Radiofrequency Ablation of the Spine and Joints; Part III, Chapter 15, Peripheral Nerve Radiofrequency Ablation** 2021; 225-240.

Erika A. Petersen, Thomas G. Stauss, James a. Scowcroft, Elizabeth S. Brooks, Judith L. White, Shawn M. Sills, Kasra Amirdelfan, Maged N. Guirguis, Jijun Xu, Cong Yu, Ali Nairizi, Denis G. Patterson, Kostandinos C. Tsoulfas, Michael J. Creamer, Vincent Galan, Richard H. Bundschu, Neel D. Mehta, Dawood Sayed, Shivanand P. Lad, David J. DiBenedetto, Khalid A. Sethi, Johnathan H. Goree, Matthew T. Bennett, Nathan J. Harrison, Atef F. Israel, Paul Chang, Paul W. Wu, Charles E. Argoff, Christian E. Nasr, Rod S. Taylor, David L. Caraway, Nagy A. Mekhail. **Durability of High-Frequency 10-kHz Spinal Cord Stimulation for Patients With Painful Diabetic Neuropathy Refractory to Conventional Treatments: 12-Month Results From a Randomized Controlled Trial.** Diabetes Care 2022;45(1):e3-e6.

Petersen EA, Stauss TG, Scowcroft JA, Brooks ES, White JL, Sills SM, Amirdelfan K, Guirguis MN, Xu J, Yu C, Nairizi A, **Patterson DG**, Tsoulfas KC, Creamer MJ, Galan V, Bundschu RH, Mehta ND, Sayed D, Lad SP, DiBenedetto DJ, Sethi KA, Goree JH, Bennett MT, Harrison NJ, Israel AF, Chang P, Wu PW, Argoff CE, Nasr CE, Taylor RS, Caraway DL, Mekhail NA (2022). **High-Frequency 10-kHz Spinal Cord Stimulation Improves Health-Related Quality of Life in Patients with Refractory Painful Diabetic Neuropathy: 12-Month Results from a Randomized Controlled Trial.** Mayo Clin Proc Innov Qual Outcomes 2022; 6(4):347-360.

Jason E. Pope, Navdeep Jassal, Dawood Sayed, **Denis Patterson**, Gladstone McDowell, Anjum Bux, Phillip Lim, Eric Chang, Ali Nairizi, Samuel Grodofsky & Timothy R Deer **A post-market, randomized, controlled, prospective study evaluating intrathecal pain medication versus conventional medical management in the non-cancer, refractory, chronic pain population (PROSPER)**, Expert Review of Medical Devices, 2022; 19:11, 895-904.

Timothy R. Deer MD, Marc A. Russo MBBS, DA (UK), Jay S. Grider DO, PhD, MBA, Jason Pope MD, Philippe Rigoard MD, PhD, Jonathan M. Hagedorn MD, Ramana Naidu MD, **Denis G. Patterson DO**, Derron Wilson MD, Timothy R. Lubenow MD, Asokumar

Buvanendran MD, Samir J. Sheth MD, Rany Abdallah MD, PhD, N. Nick Knezevic MD, PhD, Stefan Schu MD, Harold Nijhuis MD, Pankaj Mehta MD, Ricardo Vallejo MD, PhD, Jay M. Shah MD, Michael E. Harned MD, Navdeep Jassal MD, Jose Manuel Gonzalez PhD, MD, Thomas P. Pittelkow DO, MPH, Shachi Patel MD, Stana Bojanic MB, BS, Kenneth Chapman MD, Natalie Strand MD, Alexander L. Green MD, BSc, MBBS, Peter Pahapill MD, PhD, Alessandra Dario MD, Fabian Piedimonte MD, Robert M. Levy MD, PhD. **The Neurostimulation Appropriateness Consensus Committee (NACC): Recommendations for Surgical Technique for Spinal Cord Stimulation.** *Neuromodulation* Volume 25, Issue 1, 2022; Pages 1-34.

Huygen F, Hagedorn JM, Falowski S, Schultz D, Vesper J, Heros RD, **Patterson DG**, Dehghan S, Ross E, Kyani A, Mansouri MB, Kallewaard JW. **Core patient-reported outcome measures for chronic pain patients treated with spinal cord stimulation or dorsal root ganglia stimulation.** *Health Qual Life Outcomes.* 2023; 21;77.

Kapural L., **Patterson D.G.**, Li S., Hatheway J., Hunter C., Rosen S., Fishman M., Gupta M., Sayed D., Christopher A., Burgher A., McJunkin T., Ross E.L., Provenzano D., Amirdelfan K. 2023. **Multiphase Spinal Cord Stimulation in Participants With Chronic Back or Leg Pain: Results of the BENEFIT-02 Randomized Clinical Trial.** *Neuromodulation* 2023; -: 1–12

Deer T., Gilligan C., Falowski S., Desai M., Pilitsis J., Jameson J., Moeschler S., Heros R., Tavel E., Christopher A., **Patterson D.**, Wahezi S., Weisbein J., Antony A., Funk R., Ibrahim M., Lim C., Wilson D., Fishell M., Scarfo K., Dickerson D., Braun E., Buchanan P., Levy R.M., Miller N., Duncan J., Xu J., Candido K., Kreiner S., Fahey M.E., Yue J. 2023. **Treatment of Refractory Low Back Pain Using Passive Recharge Burst in Patients Without Options for Corrective Surgery: Findings and Results From the DISTINCT Study, a Prospective Randomized Multicenter Controlled Trial.** *Neuromodulation* 2023; -: 1–13.

**Denis G. Patterson**, Derron Wilson, Michael A. Fishman, Gregory Moore, Ioannis Skaribas, Robert Heros, Soroush Dehghan, Erika Ross, Anahita Kyani. **Objective wearbale measures correlate with self-reported chronic pain levels in people with spinal cord stimulation systems.** *NPJ Digital Medicine* 2023; 1-9.

Erika A. Petersen, Thomas G. Stauss, James A. Scowcroft, Michael J. Jaasma, Elizabeth S. Brooks, Deborah R. Edgar, Judith L. White, Shawn M. Sills, Kasra Amirdelfan, Maged N. Guirguisi, Jijun Xu, Cong Yu, Ali Nairizi, **Denis G. Patterson**, Kostandinos C. Tsoufias, Michael J. Creamer, Vincent Galan, Richard H. Bundschu, Neel D. Mehta, Dawood Sayed, Shivanand P. Lad, David J. DiBenedetto, Khalid A. Sethi, Johnathan H. Goree, Matthew T. Bennett, Nathan J. Harrison, Atef F. Israel, Paul Chang, Paul W. Wu, Charles E. Argoff, Christian E. Nasr, Rod S. Taylor, David L. Caraway, Nagy A. Mekhail. **Long-term efficacy of high-frequency (10 kHz) spinal cord stimulation for the treatment of painful diabetic neuropathy: 24-Month results of a randomized controlled trial.** *Diabetes Research and Clinical Practice* 203 (2023) 110865.

Robert Heros, **Denis Patterson**, Frank Huygen, Ioannis Skaribas, David Schultz, Derron Wilson, Michael Fishman, Steven Falowski, Gregory Moore, Jan Willem Kallewaard, Soroush Dehghan, Anahita Kyani and Misagh Mansouri. **Objective wearable measures and subjective questionnaires for predicting response to neurostimulation in people with chronic pain.** *Bioelectronic Medicine* (2023)9:13.

Steven M Falowski, Louis J Raso, Vipul Mangal, Ali Nairizi, **Denis G Patterson**, Michael D Danko, Rafael Justiz, Rainer S Vogel, Sebastian Koga , Yousseff Josephson, Jason E Pope, Oluwatodimu Richard Raji. **Early Functional Outcomes in Low Back Pain Subjects with a Novel Interspinous Fusion Device: REFINE Study 6-Month Results.** *Journal of Pain Research* 2023:16 4113–4126.

### **Conference Abstracts/Presentations/Posters**

Petersen EA, Stauss TG, Scowcroft JA, Brooks ES, White JL, Sills SM, Amirdelfan K, Guirguis MN, Xu J, Yu C, Nairizi A, **Patterson DG**, Galan V, Bundschu RH, Mehta ND, Sayed D, Lad SP, DiBenedetto DJ, Sethi KA, Wu PW, Argoff CE, Nasr CE, Taylor RS, Caraway DL, Mekhail NA. **10-kHz Spinal Cord Stimulation is a Durable Treatment for Painful Diabetic Neuropathy: Long-Term Multicenter Randomized Controlled Trial Results.** International Neuromodulation Society 15th World Congress, Barcelona, Spain. 2022.

Petersen EA, Stauss TG, Scowcroft JA, Brooks ES, White JL, Sills SM, Amirdelfan K, Guirguis MN, Xu J, Yu C, Nairizi A, **Patterson DG**, Galan V, Bundschu RH, Mehta ND, Sayed D, Lad SP, DiBenedetto DJ, Sethi KA, Wu PW, Argoff CE, Nasr CE, Taylor RS, Caraway DL, Mekhail NA. **24-Month Results for 10kHz Spinal Cord Stimulation (SCS) in Treating Painful Diabetic Neuropathy (PDN).** American Diabetes Association 82nd Scientific Sessions, New Orleans, Louisiana. 2022.

Petersen EA, Stauss TG, Scowcroft JA, Brooks ES, White JL, Sills SM, Amirdelfan K, Guirguis MN, Xu J, Yu C, Nairizi A, **Patterson DG**, Galan V, Bundschu RH, Mehta ND, Sayed D, Lad SP, DiBenedetto DJ, Sethi KA, Wu PW, Argoff CE, Nasr CE, Taylor RS, Caraway DL, Mekhail NA. **Evidence of durable reduction in pain and sensory symptoms of diabetic neuropathy with 10kHz spinal cord stimulation: 24-month outcomes from an RCT.** Fourth Annual American Society of Pain & Neuroscience Conference, Miami Beach, Florida. 2022.

Petersen EA, Stauss TG, Scowcroft JA, White JL, Sills SM, Amirdelfan K, Guirguis MN, Xu J, Yu C, Nairizi A, **Patterson DG**, Galan V, Bundschu RH, Mehta ND, Sayed D, Lad SP, DiBenedetto DJ, Sethi KA, Wu PW, Argoff CE, Nasr CE, Taylor RS, Caraway DL, Mekhail NA. **Durability of 10-kHz Spinal Cord Stimulation for Painful Diabetic Neuropathy: 18-Month Multicenter Randomized Controlled Trial Results.** American Podiatric Medical Association Annual Scientific Meeting, Orlando, Florida. 2022.

Petersen EA, Levy BL, Stauss TG, Scowcroft JA, Jaasma MJ, White JL, Sills SM, Amirdelfan K, Guirguis MN, Xu J, Yu C, Nairizi A, **Patterson DG**, Galan V, Bundschu RH, Mehta ND, Sayed D, Lad SP, DiBenedetto DJ, Sethi KA, Wu PW, Argoff CE, Nasr CE, Taylor RS, Caraway DL, Mekhail NA. **High Frequency (10 kHz) Spinal Cord Stimulation Provides Durable Symptom Relief for Patients with Painful Diabetic Neuropathy.** ADCES22, Association of Diabetes Care & Education Specialists, Baltimore, Maryland. 2022.

Petersen EA, Stauss TG, Scowcroft JA, Jaasma MJ, White JL, Sills SM, Amirdelfan K, Guirguis MN, Xu J, Yu C, Nairizi A, **Patterson DG**, Galan V, Bundschu RH, Mehta ND, Sayed D, Lad SP, DiBenedetto DJ, Creamer MJ, Wu PW, Argoff CE, Nasr CE, Taylor RS, Caraway DL, Mekhail NA. **Treatment of Painful Diabetic Neuropathy (PDN): High-Frequency (10 kHz) Spinal Cord Stimulation (SCS) Provides Significant, Durable Pain Relief for PDN Patients.** PAINWeek Conference 2022, Las Vegas, Nevada.

Petersen EA, Stauss TG, Scowcroft JA, White JL, Sills SM, Amirdelfan K, Guirguis MN, Xu J, Yu C, Nairizi A, **Patterson DG**, Galan V, Taylor RS, Caraway DL, Mekhail NA. **Evidence of Significant Reduction in Pain and Sensory Symptoms of Diabetic Neuropathy with 10 kHz Spinal Cord Stimulation: 24-month RCT Outcomes.** European Association for the Study of Diabetes Annual Meeting, Stockholm, Sweden. 2022.

Petersen EA, Stauss TG, Scowcroft JA, Jaasma MJ, White JL, Sills SM, Amirdelfan K, Guirguis MN, Xu J, Yu C, Nairizi A, **Patterson DG**, Galan V, Bundschu RH, Mehta ND, Sayed D, Lad SP, DiBenedetto DJ, Sethi KA, Wu PW, Argoff CE, Nasr CE, Taylor RS, Caraway DL, Mekhail NA. **10 kHz Spinal Cord Stimulation Provides Significant, Durable Symptom Relief for Patients with Painful Diabetic Neuropathy: 24-Month Results.** 22nd Diabetic Foot Conference (DFCon), Los Angeles, California. 2022.

## **Presentations**

Ultrasound Guided Versus Non-Guided Tibiotalar and Subtalar Joint Injections: A Cadaveric Study.  
Presented at the American Academy of Physical Medicine and Rehabilitation Annual Assembly Meeting 2006

“The Pain Treatment Algorithm and Neuromodulation”  
St Jude Medical National Neuromodulation 101 Fellows Program 2013  
Chicago, IL  
October 19 – 20, 2013

“Risk Mitigation and Complications”  
St Jude Medical National Neuromodulation 101 Fellows Program 2013  
Chicago, IL

October 19 – 20, 2013

“Healthcare and Social Media”

St Jude Medical National Neuromodulation 201 Fellows Program 2014

Dallas, TX

February 22 – 23, 2014

“Ethics in Pain Management”

Panel Speaker

St Jude Medical National Neuromodulation 201 Fellows Program 2014

Dallas, TX

February 22 – 23, 2014

“Understanding the Pain Market and SCS Positioning”

St Jude Medical National Neuromodulation 201 Fellows Program 2014

Dallas, TX

February 22 – 23, 2014

“My Most Challenging and Rewarding Case”

Panel Speaker

St Jude Medical National Neuromodulation 401 Fellows Program 2014

San Juan, Puerto Rico

June 19, 2014

“Managing Patient Expectations”

Panel Speaker

St Jude Medical National Neuromodulation 401 Fellows Program 2014

San Juan, Puerto Rico

June 19, 2014

“Ethics and Re-imbursement of SCS”

Panel Speaker

St Jude Medical National Neuromodulation 401 Fellows Program 2014

San Juan, Puerto Rico

June 19, 2014

“Your First Implant”

Panel Speaker

St Jude Medical National Neuromodulation 401 Fellows Program 2014

San Juan, Puerto Rico

June 19, 2014

“How to Navigate Your First Year in Practice”

Panel Speaker

St Jude Medical National Neuromodulation 401 Fellows Program 2014

San Juan, Puerto Rico

June 19, 2014

“Applications in Knee Supra-scapular, Obturator, and Occipital  
Radiofrequency Therapies”

New Applications in Radiofrequency Therapy

St Jude Medical

Las Vegas, NV

December 13, 2014

Live Presentation and Patient Injection for Upper Limb Spasticity

Allergan 2015 Neurosciences National Sales Meeting

Las Vegas, NV

February 26, 2015

St Jude Medical Product Development Lab

St Jude Medical

Plano, TX

April 26, 2015

“Radiofrequency Applications for Peripheral Nerves”

St Jude Medical

Riverside, CA

June 16, 2015

Upper Limb Spasticity Botox Live Program

“Upper Limb Spasticity: Diagnostic Techniques and Implementing  
Botox Treatment”

Allergan Neurosciences

Reno, NV

June 29, 2015

Emerging Leader Summit

Medtronic, Inc

Miami, FL

September 11 - 13, 2015

Upper Limb Spasticity & Cervical Dystonia Botox Live Program

“Upper Limb Spasticity & Cervical Dystonia: Diagnostic Techniques  
and Implementing Botox Treatment”

Allergan Neurosciences

Los Gatos, CA

September 24, 2015

Upper Limb Spasticity & Cervical Dystonia Botox Live Program

“Upper Limb Spasticity & Cervical Dystonia: Diagnostic Techniques  
and Implementing Botox Treatment”

Allergan Neurosciences  
Fresno, CA  
December 9, 2015

Allergan 2016 Neurosciences National Sales Meeting  
Cedar Creek, TX  
February 23 - 24, 2016

Fundamentals of Implantable Pain Therapies - Faculty  
“Transition to Practice”  
Medtronic, Inc  
Phoenix, AZ  
February 28, 2016

Peripheral Nerve Stimulation/Ablation Ad Board  
DRG Investigational Approaches  
Medtronic, Inc  
Sydney, Australia  
March 18 – 19, 2016

DRG Faculty Training: Great Expectations 2016  
St Jude Medical  
Dallas, TX  
April 1 – 3, 2016

Presentation on Pain Management  
Nevada State Medical Association  
Reno, NV  
April 12, 2016

SJM DRG Education Course: Great Expectations 2016 - Faculty  
St Jude Medical  
Dallas, TX  
May 21 – 22, 2016

Pain Fellows Leaders’ Summit - Faculty  
Medtronic, Inc  
Minneapolis, MN  
June 3, 2016

St Jude Medical SCS, RF, and DRG Physician Assistant and Nurse  
Practitioner Educational Symposium – Faculty  
St Jude Medical  
Phoenix, AZ  
June 18, 2016

Axium Neurostimulation System Education Program – Faculty  
St Jude Medical  
Dallas, TX  
July 16 - 17, 2016

Opioids: What You Should Know About Pain Management and  
Substance Abuse - Presenter  
Nevada State Medical Association  
Reno, NV  
August 9, 2016

Fundamentals of Implantable Pain Therapies - Faculty  
Medtronic, Inc  
Long Beach, CA  
September 10 – 11, 2016

Botox for Chronic Migraine Live Program  
Allergan Neurosciences  
Las Vegas, NV  
September 29, 2016

Opioids: What You Should Know About Pain Management and  
Substance Abuse - Presenter  
Washoe County Medical Society  
Reno, NV  
October 18, 2016

Spinal Cord Stimulation Proctorship  
Abbott Medical  
Reno, NV  
December 9, 2016

Botox for Chronic Migraine Live Program  
Allergan Neurosciences  
Reno, NV  
December 15, 2016

Botox for Chronic Migraine Live Program  
Allergan Neurosciences  
Reno, NV  
December 20, 2016

Opioids: What You Should Know About Pain Management and  
Substance Abuse - Presenter  
Carson Douglas Medical Society  
Carson City, NV



January 25, 2017

Spinal Cord Stimulation Proctorship  
Abbott Medical  
Reno, NV  
February 10, 2017

Axium Neurostimulation System Physician Training: A Case Based  
Learning Program – Faculty  
Abbott Medical  
Dallas, TX  
February 11 – 12, 2017

Dorsal Root Ganglion Stimulation and Chronic Neuropathic Joint Pain –  
Presenter  
Barton Medical Center  
South Lake Tahoe, CA  
February 21, 2017

What is Pain Management - Presenter  
Nevada Primary Care Association  
Reno, NV  
February 27, 2017

Botox for Chronic Migraine Live Program  
Allergan Neurosciences  
Las Vegas, NV  
April 19, 2017

Botox for Chronic Migraine Live Program  
Allergan Neurosciences  
Las Vegas, NV  
April 20, 2017

American Society of Interventional Pain Physicians  
Topics In Neuromodulation Presentation – BurstDR Stimulation  
Las Vegas, NV  
April 21, 2017

Axium Neurostimulation System Education Program – Faculty  
Abbott Medical  
Dallas, TX  
May 6 – 7, 2017

“Right Therapy for the Right Patient”  
Abbott Velocity Dinner Program

Sacramento, CA  
May 18, 2017

Axiom Neurostimulation System Education Program – Faculty  
Abbott Medical  
Dallas, TX  
June 10 – 11, 2017

Spinal Radiofrequency Ablation Proctorship  
Abbott Medical  
Reno, NV  
July 17, 2017

Spinal Radiofrequency Ablation Proctorship  
Abbott Medical  
Reno, NV  
July 14, 2017

Axiom Neurostimulation System Education Program – Faculty  
Abbott Medical  
Dallas, TX  
July 16 – 17, 2017

Flowonix Advisory Board Meeting  
Flowonix  
Phoenix, AZ  
August 4 – 6, 2017

Axiom Neurostimulation System Education Program – Faculty  
Abbott Medical  
Dallas, TX  
August 12 - 13, 2017

Spinal Radiofrequency Ablation Proctorship  
Abbott Medical  
Reno, NV  
September 15, 2017

“Right Therapy for the Right Patient”  
Alliance Interventional Medical Summit 2017  
Orlando, FL  
November 4, 2017

Superior Proctor Training - Faculty  
Vertiflex  
Miami, FL

January 20 – 21, 2018

Superior Proctor Training - Faculty  
Vertiflex  
Dallas, TX  
February 10 - 11, 2018

Botox for Chronic Migraine Live Program  
Allergan Neurosciences  
Las Vegas, NV  
March 13, 2017

Spinal Cord Stimulation Proctorship  
Abbott Medical  
Reno, NV  
November 10, 2017

Radiofrequency Ablation and Joint Pain - Presenter  
Barton Medical Center  
South Lake Tahoe, CA  
November 14, 2017

Spinal Cord Stimulation and Chronic Neuropathic Pain - Presenter  
Nevada Association of Nurse Practitioners Association  
Reno, NV  
November 14, 2017

Dorsal Root Ganglion Stimulation and Chronic Neuropathic Pain –  
Presenter  
Nevada Association of Nurse Practitioners Association  
Reno, NV  
February 13, 2018

BOTOX® for Upper & Lower Limb Spasticity - Proctorship  
Allergan Neurosciences  
Reno, NV  
March 14, 2018

Superior Proctor Training - Faculty  
Vertiflex  
Dallas, TX  
March 17 - 18, 2018

Spinal Cord Stimulation Proctorship  
Abbott Medical  
Reno, NV

March 23, 2018

BOTOX® for Upper & Lower Limb Spasticity - Proctorship  
Allergan Neurosciences  
Honolulu, HI  
March 28, 2018

BOTOX® for Chronic Migraine - Proctorship  
Allergan Neurosciences  
Lihue, HI  
March 30, 2018

Non-opioid Chronic Pain Treatments  
Washoe County Medical Society Presentation  
Reno, NV  
April 17, 2018

BOTOX® for Chronic Migraine - Proctorship  
Allergan Neurosciences  
Napa, CA  
May 23, 2018

Dorsal Root Ganglion Stimulation and Chronic Neuropathic Pain –  
Presenter  
Abbott Medical  
Sacramento, CA  
May 23, 2018

“Radiofrequency of the Spine”  
Panel Speaker  
West Virginia Society of Interventional Pain Physicians, Pain 2018  
Miami, FL  
June 1, 2018

“Discogenic Pain – What is the Best Solution”  
Panel Speaker  
West Virginia Society of Interventional Pain Physicians, Pain 2018  
Miami, FL  
June 2, 2018

Axiom Neurostimulation System Education Program – Faculty  
Abbott Medical  
Long Beach, CA  
June 9 - 10, 2018

Axiom Neurostimulation System Education Program – Faculty

Abbott Medical  
Dallas, TX  
June 23 - 24, 2018

“Right Therapy for the Right Patient”  
Abbott Medical  
San Diego, CA  
June 28, 2018

Dorsal Root and Spinal Cord Stimulation Proctorship  
Abbott Medical  
Reno, NV  
July 27, 2018

“Right Therapy for the Right Patient”  
Alliance Interventional Medical Summit 2018  
Orlando, FL  
July 28, 2018

Radiofrequency Ablation and Spinal Cord Stimulation Proctorship  
Abbott Medical  
Reno, NV  
August 10, 2018

“Aim at the CGRP Receptor (CGRP-R) in Migraine Prevention”  
Amgen Pharmaceuticals  
Roseville, CA  
September 6, 2018

Essentials in Endovenous Treatment of Superficial Venous Disease  
Medtronic  
Chicago, IL  
September 15 – 16, 2018

“Right Therapy for the Right Patient”  
Abbott Medical  
Phoenix, AZ  
September 28, 2018

“12 Steps for Proper Opioid Prescribing”  
Echo Project – University Nevada Reno  
Reno, NV  
October 11, 2018

Radiofrequency Ablation, Dorsal Root and Spinal Cord Stimulation  
Proctorship

Abbott Medical  
Reno, NV  
October 12, 2018

Axiom Neurostimulation System Education Program – Faculty  
Abbott Medical  
San Francisco, CA  
October 13 - 14, 2018

“Aim at the CGRP Receptor (CGRP-R) in Migraine Prevention”  
Amgen Pharmaceuticals  
Reno, NV  
October 24, 2018

Radiofrequency Ablation, Dorsal Root and Spinal Cord Stimulation  
Proctorship  
Abbott Medical  
Reno, NV  
October 26, 2018

Pain reduction and functional improvement after Posterior Approach SI  
Stabilization and Fusion with specialized graft: A Case Series  
Poster Presentation  
CASIPP 9<sup>th</sup> Annual Conference  
Santa Barbara, CA  
November 2 - 4, 2018

“Increasing Your Presence and Marketing Pearls”  
CASIPP 9<sup>th</sup> Annual Conference  
Santa Barbara, CA  
November 4, 2018

“To Burn Or Not To Burn: RFA vs Neurostimulation Options”  
El Paso Pain Society Meeting - Abbott Medical  
El Paso, TX  
November 15, 2018

“Uniquely Investing in Advancing Neuromodulation”  
Nevada Association of Nurse Practitioners Association  
Reno, NV  
December 11, 2018

Proclaim™ DRG Neurostimulation System Education Program –  
Faculty  
Abbott Medical  
Salt Lake City, UT

January 12, 2019

Techniques in Neuromodulation: Percutaneous SCS and RF  
Proctorship  
Abbott Medical  
Reno, NV  
January 24 – 25, 2019

“Neurstimulation”  
Advanced Practitioner Course on Neuromodulation - Faculty  
Abbott Medical  
Phoenix, AZ  
February 2, 2019

“Redefining Chronic Pain Relief”  
Advanced Practitioner Course on Neuromodulation - Faculty  
Abbott Medical  
Phoenix, AZ  
February 2, 2019

“The Latest Data for Aimovig”  
Amgen Pharmaceuticals  
Sacramento, CA  
February 5, 2019

“Role of Spinal Cord Stimulation and Target Drug Delivery for  
Treatment of Chronic Pain”  
University of Reno Nevada – Echo Project  
Reno, NV  
February 20, 2019

Posterior Sacroiliac Joint Fusion Program - Faculty  
CornerLoc Medical  
Spokane, WA  
February 24, 2019

Posterior Sacroiliac Joint Fusion Program - Faculty  
CornerLoc Medical  
Orange County, CA  
March 16, 2019

“HF10 Spinal Cord Stimulation Therapy: relief for painful diabetic  
peripheral neuropathy”  
Northern Nevada Medical Center  
April 2, 2019

“Emergency Room Opioid Protocols”  
University of Reno Nevada – Echo Project  
Reno, NV  
May 1, 2019

“SCS and DRG Technology and Clinical Overview”  
Abbott Medical  
Anchorage, AK  
May 6, 2019

“Dorsal Root Ganglion Stimulation and Chronic Neuropathic Joint Pain”  
Abbott Medical  
Anchorage Fracture and Orthopedic  
Anchorage, AK  
May 7, 2019

Proclaim™ DRG Neurostimulation System – Faculty  
Abbott Medical  
Dallas, TX  
May 11, 2019

“CDC Guidelines For Prescribing Opioids For Chronic Pain”  
University of Reno Nevada – Echo Project  
Reno, NV  
May 15, 2019

“The Latest Data for Aimovig”  
Amgen Pharmaceuticals  
Hood River, OR  
May 16, 2019

“The Latest Data for Aimovig”  
Amgen Pharmaceuticals  
Corvallis, OR  
May 16, 2019

“12 Step Program for Opioid Prescribing”  
University of Reno Nevada – Echo Project  
Reno, NV  
June 5, 2019

Minimally Invasive Spine & MSK Neurotomy Workshop – Faculty  
California Society of Interventional Pain Physicians  
San Francisco, CA  
June 8, 2019



Techniques in Neuromodulation: Percutaneous SCS and DRG  
Proctorship  
Abbott Medical  
Reno, NV  
June 14, 2019

“The Latest Data for Aimovig”  
Amgen Pharmaceuticals  
Sacramento, CA  
June 26, 2019

“Treatment of the virgin back with neuromodulation” - Panel Presenter  
American Society of Pain and Neurosciences (ASPN) and WVSIPP  
Meeting  
Miami Beach, FL  
July 26, 2019

“Treatment of the virgin back with neuromodulation”  
American Society of Pain and Neurosciences (ASPN) and WVSIPP  
Meeting  
Miami Beach, FL  
July 26, 2019

“SI Joint Fusion Experiences with CornerLoc”  
American Society of Pain and Neurosciences (ASPN) and WVSIPP  
Meeting  
CornerLoc Medical  
Miami Beach, FL  
July 27, 2019

”Spinal Cord Stimulation Debates: #1) Anatomical vs. Parathesia  
Mapping #2) Awake vs. Asleep #3) Placement, Neuromonitoring  
And Waveform Antibiotics  
American Society of Pain and Neurosciences (ASPN) and WVSIPP  
Meeting  
Miami Beach, FL  
July 27, 2019

Chronic Migraine Local Live: A Foundational Chronic Migraine  
Treatment  
Allergan Neurosciences  
Chico, CA  
August 7, 2019

Foundations in Neuromodulation for the Pain Management Fellow -

Faculty  
Abbott Medical  
Dallas, TX  
August 11, 2019

“Pain Management in a General Medicine Setting” – Panel Presenter  
Nevada Opioid Abuse Prevention Summit  
Las Vegas, Nevada  
August 14, 2019

Chronic Migraine Proctorship: A Foundational Chronic Migraine  
Treatment  
Allergan Neurosciences  
Hidden Valley Lake, CA  
September 10, 2019

“Pain Management Tools: Tools for your patients and your practice”  
Nevada Board of Medicine Best Practice Guidelines  
Reno, NV  
September 22, 2019

“What is Pain Management: Appropriate Treatment for Pain”  
Nevada Board of Medicine Best Practice Guidelines  
Reno, NV  
September 22, 2019

DRG New Implanter Training – Faculty  
Abbott Medical  
Dallas, TX  
September 28, 2019

Chronic Migraine Preceptorship: A Foundational Chronic Migraine  
Treatment  
Allergan Neurosciences  
Reno, NV  
October 14, 2019

“Peristaltic versus Dual Valve Gated Technology”  
Flowonix Medical  
Chicago, IL  
October 18, 2019

Flowonix Cadaver Lab – Faculty  
Flowonix Medical  
Chicago, IL  
October 19, 2019

“Spinal Cord Stimulation and Limb Salvage”

University of Nevada

October 23, 2019

Cadaver Workshop – Faculty

Dorsal Root Ganglion Stimulation

California Society of Interventional Pain Physicians

Squaw Valley, Lake Tahoe, California

October 25, 2019

Advanced Practice Provider Course – Faculty

California Society of Interventional Pain Physicians

Squaw Valley, Lake Tahoe, California

October 25, 2019

“Advanced Interventional Techniques: Choosing the appropriate  
Procedure”

California Society of Interventional Pain Physicians

Squaw Valley, Lake Tahoe, California

October 25, 2019

“Lumbar Spinal Stenosis with Neurogenic Claudication”

California Society of Interventional Pain Physicians

Squaw Valley, Lake Tahoe, California

October 26, 2019

“Increasing Your Presence and Marketing Pearls”

CASIPP 10<sup>th</sup> Annual Conference

Squaw Valley, Lake Tahoe, California

October 27, 2019

“The Latest Data for Aimovig”

Amgen Medical

Redding, CA

October 28, 2019

“CornerLoc: SI Joint Fusion for Pain Management”

AZSIPP/ASP Fall Dinner Meeting

Phoenix, AZ

October 29, 2019

Clinical Partners in Research Meeting

Abbott Medical

Phoenix, AZ

November 2, 2019

Posterior Sacroiliac Joint Fusion Program - Faculty  
CornerLoc Medical  
Denver, CO  
November 3, 2019

“Spinal Cord Stimulation Therapy”  
Topic in Neuromodulation  
American Society of Regional Anesthesia and Pain Medicine Meeting  
Abbott Medical  
New Orleans, LA  
November 15, 2019

Posterior Sacroiliac Joint Fusion Program - Faculty  
CornerLoc Medical  
Las Vegas, NV  
November 22, 2019

Chronic Migraine Preceptorship: A Foundational Chronic Migraine  
Treatment  
Allergan Neurosciences  
San Leandro, CA  
December 3, 2019

“Peristaltic versus Dual Valve Gated Technology”  
American Society of Pain and Neurosciences Cadaver Lab 2019  
Flowonix Medical  
Phoenix, AZ  
December 6, 2019

“Patient Selection and Case Studies”  
American Society of Pain and Neurosciences Cadaver Lab 2019  
CornerLoc Medical  
Phoenix, AZ  
December 7, 2019

“Optimization of the BurstDr Stimulation Waveform”  
Topic in Neuromodulation  
American Society of Pain and Neurosciences Cadaver Lab 2019  
Abbott Medical  
Phoenix, AZ  
December 7, 2019

“Interventional Pain Procedures”  
University of Nevada at Reno  
Reno, NV

January 15, 2020

“Improving Limb Salvage in Critical Limb Ischemia with Spinal Cord Stimulation”

North American Neuromodulation Society  
Annual Assembly Meeting  
Las Vegas, NV  
January 24, 2020

“Lower Your Dose, Raise Your Expectations”

Topics in Neuromodulation Dinner – Abbott Medical  
North American Neuromodulation Society  
Annual Assembly Meeting  
Las Vegas, NV  
January 24, 2020

“Innovations in Neuromodulation”

Abbott Medical  
North American Neuromodulation Society  
Annual Assembly Meeting  
Las Vegas, NV  
January 25, 2020

“UBRELVY: A New Acute Treatment Option for Migraine”

Allergan Neurosciences  
Sacramento, CA  
January 30, 2020

“UBRELVY: A New Acute Treatment Option for Migraine”

Allergan Neurosciences  
Reno, NV  
February 3, 2020

“Emergency Room Opioid Protocols”

University of Reno Nevada – Echo Project  
Reno, NV  
February 5, 2020

Techniques in Neuromodulation: Spinal Cord Stimulation Proctorship

Abbott Medical  
Reno, NV  
February 28, 2020

“UBRELVY: A New Acute Treatment Option for Migraine”

Allergan Neurosciences  
Las Vegas, NV  
March 4, 2020

Techniques in Neuromodulation: Dorsal Root Ganglion Proctorship  
Abbott Medical  
Reno, NV  
March 6, 2020

Minimally Invasive Lumbar Decompression (MILD) Training – Course  
Director  
University of California at San Diego Medical Center  
Vertos Medical  
San Diego, CA  
March 7, 2020

“Lumbar Spinal Stenosis and Treatment Options”  
Northern Nevada Medical Center  
Reno, NV  
March 10, 2020

” BurstDR™ Stimulation and its Consistent Evidence of being a Novel  
Waveform” – Panel Presenter  
Abbott Medical  
Webinar  
March 25, 2020

Chronic Migraine Virtual Local Live: A Foundational Chronic Migraine  
Treatment  
Allergan Neurosciences  
Webinar  
April 14, 2020

“A Treatment Option for Chronic Pain from CRPS and Causalgia”  
Abbott Medical  
Webinar for the Reflex Sympathetic Dystrophy Syndrome Association  
April 22, 2020

“BOLD Publication Talk Show” – Panel Presenter  
Abbott Medical  
Webinar  
April 29, 2020

“12 Step Program for Opioid Prescribing”  
University of Reno Nevada – Echo Project  
Reno, NV  
June 2, 2020

“UBRELVY: A New Acute Treatment Option for Migraine”  
Allergan Neurosciences

Webinar  
June 1, 2020

“SI Joint Dysfunction: A Webinar for Interventional Pain Physicians”  
CornerLoc  
Webinar  
June 4, 2020

“UBRELVY: A New Acute Treatment Option for Migraine”  
Allergan Neurosciences  
Webinar  
June 8, 2020

“Treatment of Sacroiliac Joint Disease”  
Pacific Spine & Pain Society  
Webinar  
June 9, 2020

Sacroiliac joint pain and treatments: CornerLoc Proctorship  
CornerLoc  
Reno, NV  
June 15, 2020

“Your Practice, Our Difference: Strategies to Grow Your Pain Practice”  
- Panel Speaker (Webinar)  
Abbott Medical  
Reno, NV  
June 23, 2020

Minimally Invasive Lumbar Decompression (MILD) Training – Course  
Director  
Vertos Medical  
Denver, CO  
July 11, 2020

“Pain Management and Alternatives to Managing Chronic Pain”  
University Of Nevada, Reno School of Medicine  
Reno, NV  
July 21, 2020

“Chronic Migraine Local Live-BOTOX®: A First-Choice Treatment in  
Chronic Migraine”  
Allergan Neurosciences  
Webinar  
July 23, 2020

“Chronic Migraine Local Live-BOTOX®: A First-Choice Treatment in Chronic Migraine”

Allergan Neurosciences

Webinar

July 29, 2020

CornerLoc: Stabilization and Bone Healing in SI Joint Arthrodesis

American Society of Pain & Neuroscience Think Tank

Webinar

August 12, 2020

Vertos Medical: Redefining the MILD Procedure: Emerging Techniques & Advancing the Treatment Algorithm

American Society of Pain & Neuroscience Think Tank

Webinar

August 18, 2020

Expanding Opportunities to Treat LSS Patients Earlier & More Often with PILD

Pacific Spine & Pain Society

Webinar

September 2, 2020

“Interventional Pain Procedures”

University of Nevada at Reno

Reno, NV

September 10, 2020

The Evidence Basis for Dorsal Column Stimulation and Review of NACC Guidelines

Pacific Spine & Pain Society 2020 Annual Meeting

San Diego, CA

September 12, 2020

Review of Percutaneous Direct Lumbar Decompression

Pacific Spine & Pain Society 2020 Annual Meeting

San Diego, CA

September 12, 2020

Digital Marketing Pearls

Pacific Spine & Pain Society 2020 Annual Meeting

San Diego, CA

September 12, 2020

“Spinal Cord and Dorsal Root Ganglion Stimulation”

Northern Nevada Medical Center



Reno, NV  
September 15, 2020

“CDC Guidelines For Prescribing Opioids For Chronic Pain”  
University of Nevada Reno – Echo Project  
Reno, NV  
September 16, 2020

“Powerful Migraine Prevention Starts Today”  
Lundbeck Pharmaceutical  
Reno, NV  
September 18, 2020

“Minimally Invasive Sacroiliac Fusion: A Discussion on  
Biomechanics, Technique, Patient Selection and Evidence”  
American Society of Pain & Neuroscience Annual Meeting  
Webinar  
September 18, 2020

“Optimization of Pain Relief Utilizing Closed Loop Spinal Cord  
Stimulation”  
American Society of Pain & Neuroscience Annual Meeting  
Webinar  
September 19, 2020

“Stimulation of the Medial Branch Nerve for Restoration of the  
Multifidus Muscle”  
American Society of Pain & Neuroscience Annual Meeting  
Webinar  
September 19, 2020

Allergan Expert-On-Demand Program  
Abbvie Pharmaceuticals  
Webinar  
September 22, 2020

“CDC Guidelines For Prescribing Opioids For Chronic Pain”  
University of Nevada Reno – Echo Project  
Reno, NV  
September 23, 2020

“UBRELVY: A New Acute Treatment Option for Migraine”  
Abbvie Pharmaceuticals  
Webinar  
September 24, 2020

“12 Step Program for Opioid Prescribing”  
University of Nevada Reno– Echo Project  
Reno, NV  
October 7, 2020

“Common Office Pain Procedures”  
University of Nevada Reno  
Reno, NV  
October 8, 2020

Interventional Pain Cadaver Lab – Proctor  
World Academy of Pain Medicine United  
San Francisco, CA  
October 10, 2020

“12 Step Program for Opioid Prescribing”  
University of Nevada Reno– Echo Project  
Reno, NV  
October 14, 2020

“Powerful Migraine Prevention Starts Today”  
Lundbeck Pharmaceutical  
Reno, NV  
October 14, 2020

“Powerful Migraine Prevention Starts Today”  
Lundbeck Pharmaceutical  
Reno, NV  
October 15, 2020

Chronic Migraine Local Live – Botox: A First-Choice Treatment in  
Chronic Migraine  
Webinar  
Allergan Neurosciences  
Portland, ME  
October 16, 2020

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
October 20, 2020

UBRELVY: Acute Treatment Option for Migraine  
Allergan Neurosciences  
Reno, NV

October 22, 2020

UBRELVY: Acute Treatment Option for Migraine  
Webinar  
Allergan Neurosciences  
Shingle Springs, CA  
October 26, 2020

Chronic Migraine Local Live – Botox: A First-Choice Treatment in  
Chronic Migraine  
Allergan Neurosciences  
Reno, NV  
November 11, 2020

“Powerful Migraine Prevention Starts Today”  
Lundbeck Pharmaceutical  
Redlands, CA  
November 16, 2020

mild® Procedure - Virtual Didactic Physician Training  
Webinar  
Vertos Medical  
Reno, NV  
November 17, 2020

Sacroiliac Joint Pain and Treatments: CornerLoc Proctorship  
CornerLoc  
Chico, CA  
November 18, 2020

UBRELVY: Acute Treatment Option for Migraine  
Allergan Neurosciences  
Reno, NV  
December 1, 2020

Chronic Migraine Local Live – Botox: A First-Choice Treatment in  
Chronic Migraine  
Allergan Neurosciences  
Reno, NV  
December 8, 2020

“Pain Management and Alternatives to Managing Chronic Pain”  
University of Nevada Reno– Echo Project  
Reno, NV  
December 16, 2020

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
December 28, 2020

“To Prescribe or Not To Prescribe: Taking Over Controlled Substances  
on New Patients”  
University of Nevada Reno– Echo Project  
Reno, NV  
February 3, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
February 5, 2021

“Don’t Be a Passive Provider: Alternatives to Pain Management”  
Webinar  
University of Nevada, Reno – School Of Medicine  
Reno, NV  
February 7, 2021

Chronic Migraine Local Live – Botox: A First-Choice Treatment in  
Chronic Migraine  
Webinar  
Allergan Neurosciences  
Reno, NV  
February 17, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
February 18, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
February 19, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences

Reno, NV  
February 24, 2021

DRG New Implanter Training – Faculty  
University of California at Davis  
Abbott Medical  
Davis, CA  
February 27, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
March 1, 2021

Chronic Migraine Preceptorship: A Foundational Chronic Migraine  
Treatment  
Allergan Neurosciences  
Reno, NV  
March 29, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
March 30, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
April 1, 2021

“Achieving Safe, Rapid Opioid Tapering With Wearable  
Neurostimulation”  
National Webinar - Panelist  
Spark Biomedical  
April 1, 2021

“A Fine Line Between Pain Management and Addiction:  
What You Need To Know”  
Washoe County Medical Society – Webinar  
Reno, NV  
April 8, 2021

“Fundamentals of Closed-Loop SCS: Understanding the Role of

Variability in Activation on Mechanism of Action”  
Pacific Spine & Pain Society – Cadaver Lab  
Las Vegas, NV  
April 10, 2021

“Powerful Migraine Prevention Starts Today”  
Lundbeck Pharmaceutical  
Sacramento, CA  
April 22, 2021

Chronic Migraine Preceptorship: A Foundational Chronic Migraine  
Treatment  
Allergan Neurosciences  
Reno, NV  
April 28, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
April 30, 2021

Stanford Medicine Pain Symposium – Instructor  
Stanford University and World Academy of Pain Medicine United  
San Francisco, CA  
May 1, 2021

“Migraines”  
University of Nevada Reno– Echo Project  
Reno, NV  
May 5, 2021

MILD Procedure – Virtual Training  
Vertos Medical  
Reno, NV  
May 5, 2021

“Pain and Aging”  
University of Nevada Reno– Echo Project  
Reno, NV  
May 19, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV

May 20, 2021

“Regenerative Intradiscal Therapies”  
Pacific Spine and Pain Society (PSPS) Minimally Invasive  
Spine and Regenerative Medicine Workshop  
Seattle, WA  
May 22, 2021

“Vertebral Compression Fracture Augmentation”  
Pacific Spine and Pain Society (PSPS) Minimally Invasive  
Spine and Regenerative Medicine Workshop  
Seattle, WA  
May 22, 2021

“The mild Procedure: Remove the Problem, Leave Nothing Behind”  
Pacific Spine and Pain Society (PSPS) Minimally Invasive  
Spine and Regenerative Medicine Workshop  
Seattle, WA  
May 22, 2021

“Powerful Migraine Prevention Starts Today”  
Webinar  
Lundbeck Pharmaceutical  
Reno, NV  
May 24, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
May 24, 2021

MILD Procedure Training – Physician to Physician training  
Live Proctorship  
Vertos Medical  
Boise, ID  
May 27, 2021

Chronic Migraine Local Live – Botox: A First-Choice Treatment in  
Chronic Migraine  
Webinar  
Allergan Neurosciences  
Reno, NV  
June 4, 2021

“Introduction to Neuromodulation and Abbott Therapies”

Advanced Practice Practitioner Course Director  
Abbott Medical  
Scottsdale, AZ  
June 5, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
June 8, 2021

“Migraine Myth Busters: Exploring the Role of Aimovig”  
Webinar  
Amgen Pharmaceuticals  
Reno, NV  
June 9, 2021

Multidisciplinary Pain Management – Moderator  
Webinar  
Pacific Spine and Pain Society  
Reno, NV  
June 15, 2021

“A Treatment Option for Chronic Pain from CRPS and Causalgia”  
Webinar for the Reflex Sympathetic Dystrophy Syndrome Association  
Abbott Medical  
Reno, NV  
June 17, 2021

UBRELVY: Acute Treatment Option for Migraine  
Allergan Neurosciences  
Reno, NV  
June 29, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
July 8, 2021

“SI Fusion Patient Selection”  
Webinar  
Pacific Spine and Pain Society  
Reno, NV  
July 13, 2021

UBRELVY: Acute Treatment Option for Migraine



Allergan Neurosciences  
Las Vegas, NV  
July 14, 2021

UBRELVY: Acute Treatment Option for Migraine  
Allergan Neurosciences  
Las Vegas, NV  
July 15, 2021

“SI Joint Fusion”  
The American Society of Pain & Neuroscience Annual Meeting Lab  
Miami, FL  
July 22, 2021

“Innovations in Neuromodulation”  
Abbott Medical  
The American Society of Pain & Neuroscience Annual Meeting  
Miami, FL  
July 22, 2021

“Minimally Invasive Techniques for Lumbar Fusion: Current  
Techniques : Facet fixation, pedicle screws, and interspinous  
devices” – Panel Presenter  
The American Society of Pain & Neuroscience Annual Meeting  
Miami, FL  
July 23, 2021

“Minimally Invasive Sacroiliac Fusion: A discussion on evidence and  
optimal surgical approach” – Panel Presenter  
The American Society of Pain & Neuroscience Annual Meeting  
Miami, FL  
July 23, 2021

“Remote Monitoring and Programming of Neuromodulation Devices”  
– Panel Presenter  
The American Society of Pain & Neuroscience Annual Meeting  
Miami, FL  
July 24, 2021

“Pain and Aging”  
Webinar  
Hello Health  
Reno, NV  
July 28, 2021

UBRELVY: Acute Treatment Option for Migraine

Webinar  
Allergan Neurosciences  
Las Vegas, NV  
August 2, 2021

“Muscle Relaxants – A Misnomer?”  
University of Nevada Reno– Echo Project  
Reno, NV  
August 4, 2021

“Pain Management and Treatment Alternatives”  
Webinar  
University of Nevada Reno Rural Hospital Program  
August 17, 2021

“Opioid Management and The Twelve Steps to Proper Opioid  
Prescribing”  
Webinar  
University of Nevada Reno Rural Hospital Program  
August 24, 2021

“Opioid Risk Assessment Tools”  
Webinar  
University of Nevada Reno Rural Hospital Program  
August 31, 2021

“Management of Acute vs Chronic Pain”  
Webinar  
University of Nevada Reno Rural Hospital Program  
September 7, 2021

UBRELVY: Acute Treatment Option for Migraine  
Allergan Neurosciences  
Las Vegas, NV  
August 17, 2021

“Recent Advancements in Lumbar Spinal Stenosis”  
University of Nevada Reno– Echo Project  
Reno, NV  
August 18, 2021

UBRELVY: Acute Treatment Option for Migraine  
Allergan Neurosciences  
Reno, NV  
August 23, 2021

UBRELVY: Acute Treatment Option for Migraine  
Allergan Neurosciences  
Reno, NV  
August 24, 2021

MILD Procedure Training – Physician to Physician training  
Live Proctorship  
Vertos Medical  
Sacramento, CA  
August 26, 2021

“SI Fusion: Is it a Pain Procedure or Spine Procedure”  
Webinar  
Pacific Spine and Pain Society  
September 16, 2021

MILD Procedure – Virtual Training  
Vertos Medical  
Reno, NV  
September 22, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
September 23, 2021

Chronic Migraine Local Live – Botox: A First-Choice Treatment in  
Chronic Migraine  
Allergan Neurosciences  
Folsom, CA  
October 4, 2021

UBRELVY: Acute Treatment Option for Migraine  
Allergan Neurosciences  
Reno, NV  
October 5, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
October 5, 2021

“Powerful Migraine Prevention Starts Today”

Webinar  
Lundbeck Pharmaceutical  
Reno, NV  
October 7, 2021

DRG New Implanters Course – Faculty  
Abbott Medical  
Dallas, TX  
October 9 – 10, 2021

“CDC Guidelines for Opiate Prescribing”  
University of Nevada Reno– Echo Project  
Reno, NV  
October 13, 2021

“Treatment Innovations for Migraine Patients”  
Allergan Neurosciences  
Roseville, CA  
October 14, 2021

“Treatment Innovations for Migraine Patients”  
Allergan Neurosciences  
Carson City, NV  
October 20, 2021

“Treatment Innovations for Migraine Patients”  
Allergan Neurosciences  
Reno, NV  
October 25, 2021

“12 Steps to Proper Opiate Prescribing”  
University of Nevada Reno– Echo Project  
Reno, NV  
October 27, 2021

“Treatment Innovations for Migraine Patients”  
Allergan Neurosciences  
Reno, NV  
October 27, 2021

MILD Procedure Training  
Vertos Medical  
Phoenix, AZ  
October 30, 2021

“Opioid Weaning – What are My Options?”

University of Nevada Reno– Echo Project  
Reno, NV  
November 3, 2021

Fellows Introduction to Neuromodulation – Faculty  
Abbott Medical  
Austin, TX  
November 6 -7, 2021

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
November 10, 2021

“Treatment Innovations for Migraine Patients”  
Allergan Neurosciences  
Lodi, CA  
November 10, 2021

“Treatment Innovations for Migraine Patients”  
Allergan Neurosciences  
Carson City, NV  
November 15, 2021

“Advancements in Treating Lumbar Degenerative Disc Disease”  
University of Nevada Reno– Echo Project  
Reno, NV  
November 17, 2021

“Treatment Innovations for Migraine Patients”  
Allergan Neurosciences  
Reno, NV  
November 18, 2021

Advanced Topics Neuromodulation Course – Faculty  
Abbott Medical  
Austin, TX  
December 4 – 5, 2021

Chronic Migraine Preceptorship: A Foundational Chronic Migraine  
Treatment  
Allergan Neurosciences  
Reno, NV  
December 9, 2021

The American Society of Pain and Neurosciences (ASPN)  
Innovation Summit Lab  
MILD Procedure Proctor  
Las Vegas, NV  
January 7, 2022

“Unique Mechanism of Action for DRG Therapy”  
North American Neuromodulation Society Annual Meeting  
Abbott Medical  
Orlando, FL  
January 13, 2022

“Proven Superiority for DRG Therapy”  
North American Neuromodulation Society Annual Meeting  
Abbott Medical  
Orlando, FL  
January 13, 2022

“Restoring Neuromodulation Benefit for Waning SCS Therapy”  
North American Neuromodulation Society Annual Meeting  
Abbott Medical  
Orlando, FL  
January 13, 2022

“Objectively Measuring Patient Therapy Response”  
North American Neuromodulation Society Annual Meeting  
Abbott Medical  
Orlando, FL  
January 14, 2022

Topics in Neuromodulation Symposium - Speaker  
North American Neuromodulation Society Annual Meeting  
Abbott Medical  
Orlando, FL  
January 14, 2022

“REALITY Sub-study: Developing an Objective Pain Score for  
Patients with Implanted Spinal Cord Stimulation”  
North American Neuromodulation Society Annual Meeting 2022  
Orlando, FL  
January 15, 2022

Chronic Migraine Local Live – Botox: A First-Choice Treatment in  
Chronic Migraine  
Webinar  
Allergan Neurosciences

Reno, NV  
January 20, 2022

Techniques in Neuromodulation: Spinal Cord Stimulation Proctorship  
Abbott Medical  
Reno, NV  
January 28, 2022

HER-MES Update – Aimovig Myth Busters  
Amgen Pharmaceuticals  
Reno, NV  
January 31, 2022

“Pain Management and Alternatives to Managing Chronic Pain”  
University of Nevada Reno– Echo Project  
Reno, NV  
February 2, 2022

“Role of Tramadol in Pain Management”  
University of Nevada Reno– Echo Project  
Reno, NV  
February 16, 2022

MILD Procedure – Virtual Training  
Vertos Medical  
Reno, NV  
February 16, 2022

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
February 17, 2022

Pacific Spine & Pain Society Neurostimulation Lab  
Dorsal Root Ganglion Procedure Proctor  
Scottsdale, AZ  
February 19, 2022

AIIS Pharmacy Experience (APEX) - Faculty  
AIIS Healthcare  
Dallas, TX  
February 26, 2022

“Treatment Innovations for Migraine Patients”  
Allergan Neurosciences

Reno, NV  
March 3, 2022

Aurora ZIP and SILO Cadaver Lab – Faculty  
Aurora Spine  
St George, UT  
March 5, 2022

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
March 10, 2022

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
March 18, 2022

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
March 18, 2022

“Treatment Innovations for Migraine Patients”  
Webinar  
Allergan Neurosciences  
Reno, NV  
March 21, 2022

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
March 22, 2022

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
March 28, 2022

“Treatment Innovations for Migraine Patients”  
Allergan Neurosciences



Reno, NV  
March 31, 2022

AIS Pharmacy Experience (APEX) - Faculty  
AIS Healthcare  
Dallas, TX  
April 2, 2022

Fellows Dorsal Root Ganglion Stimulation Course – Faculty  
Abbott Medical  
Austin, TX  
April 9-10, 2022

MILD Procedure – Virtual Training  
Vertos Medical  
Reno, NV  
April 13, 2022

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
April 14, 2022

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
April 18, 2022

MILD Procedure Training – Physician to Physician training  
Live Proctorship  
Vertos Medical  
Roseville, CA  
April 22, 2022

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
April 27, 2022

VIA Disc NP Masters Course – Faculty  
Webinar  
Vivex Biologics  
Reno, NV

April 27, 2022

“Muscle Relaxants: Misnomer?”  
University of Nevada Reno– Echo Project  
Reno, NV  
May 4, 2022

“Powerful Migraine Prevention”  
Webinar  
Lundbeck Pharmaceutical  
Reno, NV  
May 12, 2022

“Portfolio of Migraine Treatments”  
Abbvie Pharmaceutical  
Stockton, CA  
May 12, 2022

mild Disrupter Summit – Faculty  
Vertos Medical  
Pasadena, CA  
May 13 - 15, 2022

“Common Office injections to MSK Pain”  
University of Nevada Reno– Echo Project  
Reno, NV  
May 18, 2022

“Portfolio of Migraine Treatments”  
Abbvie Pharmaceutical  
Las Vegas, NV  
June 1, 2022

“Portfolio of Migraine Treatments”  
Abbvie Pharmaceutical  
Las Vegas, NV  
June 2, 2022

Coordinated Care Course: Optimizing Outcomes for the Pain Patient –  
Faculty  
Abbott Neuromodulation  
Austin, TX  
June 4 – 5, 2022

Chronic Migraine – Expert on Demand  
Webinar

Allergan Neurosciences  
Reno, NV  
June 6, 2022

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
June 8, 2022

CornerLoc Patient Education Webinar  
Webinar  
CornerLoc  
Reno, NV  
June 12, 2022

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
June 16, 2022

Chronic Migraine Local Live-BOTOX®: A First-Choice Treatment in  
Chronic Migraine  
Allergan Neurosciences  
Sacramento, CA  
June 16, 2022

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
June 21, 2022

“Utilizing Ultrasound for MSK & Pain Injections: Techniques & Best  
Practices”  
Webinar  
Pajunk Medical  
Reno, NV  
June 22, 2022

“Know Your Back Story” National Health Awareness Campaign -  
Faculty  
Vertos Medical  
New York, NY  
June 22, 2022

VIA Disc NP Masters Course – Faculty  
Webinar  
Vivex Biologics  
Reno, NV  
June 29, 2022

“The Imaging of Pain: What Is Abnormal?” – Panel Presenter  
The American Society of Pain & Neuroscience Annual Meeting  
Miami, FL  
July 15, 2022

“Mechanisms of Spinal Disease: Spinal Stenosis, Spondylolisthesis,  
Degenerative Disc Disease” – Panel Presenter  
The American Society of Pain & Neuroscience Annual Meeting  
Miami, FL  
July 15, 2022

“The Importance of Patient Centricity”  
ASPN 2022 Abbott Lunch Symposium  
Miami Beach, FL  
July 16, 2022

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
July 21, 2022

Coordinated Care Course: Optimizing Outcomes for the Pain Patient –  
Faculty  
Abbott Neuromodulation  
Austin, TX  
July 23 - 24, 2022

“Common Office Injections to MSK Pain Pt II”  
University of Nevada Reno– Echo Project  
Reno, NV  
August 3, 2022

“Common Office Pain Procedures”  
Pajunk Medical National Sales Meeting  
Pajunk Medical  
Webinar  
Reno, NV  
August 9, 2022

“Portfolio of Migraine Treatments”

Abbvie Pharmaceutical

Carson City, NV

August 11, 2022

“Common Office MSK Procedures”

Pajunk Medical National Sales Meeting

Pajunk Medical

Webinar

Reno, NV

August 16, 2022

“Opioid Weaning Protocols”

University of Nevada Reno– Echo Project

Reno, NV

August 17, 2022

mild® Procedure - Virtual Didactic Physician Training

Webinar

Vertos Medical

Reno, NV

August 17, 2022

“Program Orientation and Introduction to Implicit Bias”

SilverSummit Healthplan Pain Management ECHO

Webinar

Reno, NV

August 24, 2022

MILD Procedure Training – Physician to Physician training

Live Proctorship

Vertos Medical

Idaho Falls, ID

August 25, 2022

Chronic Migraine – Expert on Demand

Webinar

Allergan Neurosciences

Reno, NV

August 26, 2022

Abbott Spinal Cord Stimulation Peer-to-Peer Program - Proctor

Abbott Neuromodulation

Reno, NV

September 2, 2022

“Lumbar Degenerative Disc Disease and Spine Surgery” – Moderator  
Pacific Spine and Pain Society Advanced Practice Practitioner Webinar  
Reno, NV  
September 7, 2022

“Portfolio of Migraine Treatments”  
Abbvie Pharmaceutical  
Las Vegas, NV  
September 14, 2022

“Portfolio of Migraine Treatments”  
Abbvie Pharmaceutical  
Las Vegas, NV  
September 15, 2022

“Migraine and Interventional Treatments”  
Advanced Practice Provider Course  
Pacific Spine and Pain Society (PSPS) 2022 Annual Conference  
Las Vegas, NV  
September 16, 2022

“Topics in Neuromodulation”  
Pacific Spine and Pain Society (PSPS) 2022 Annual Conference  
Abbott Neuromodulation  
Las Vegas, NV  
September 16, 2022

“Dorsal Root Ganglion Stimulation: Beyond CRPS”  
Pacific Spine and Pain Society (PSPS) 2022 Annual Conference  
Las Vegas, NV  
September 17, 2022

“Sacroiliac Joint Fusion, Lateral and Posterior Approaches” –  
Panel Presenter  
Pacific Spine and Pain Society (PSPS) 2022 Annual Conference  
Las Vegas, NV  
September 17, 2022

“Common Lower Extremities MSK Pain”  
University of Nevada Reno– Echo Project  
Reno, NV  
September 21, 2022

MILD Procedure Training – Physician to Physician training  
Live Proctorship

Vertos Medical  
Redding, CA  
September 27, 2022

“CDC Guidelines for Opiate Prescribing”  
SilverSummit Healthplan Pain Management ECHO  
Webinar  
Reno, NV  
September 28, 2022

“12 Steps to Proper Opiate Prescribing: Opiates, Benzos, & More”  
SilverSummit Healthplan Pain Management ECHO  
Webinar  
Reno, NV  
October 12, 2022

“Popular Joint & Bursa Injections Using Ultrasound (Part 1)”  
Webinar  
Pajunk Medical  
Reno, NV  
October 13, 2022

“Powerful Migraine Prevention”  
Lundbeck Pharmaceutical  
Reno, NV  
October 18, 2022

“Portfolio of Migraine Treatments”  
Abbvie Pharmaceutical  
Reno, NV  
October 18, 2022

“Opioids: What You Should Know About Opioid Prescribing”  
Rocky Mountain Vista College of Osteopathic Medicine  
Webinar  
Reno, NV  
October 29, 2022

Chronic Migraine Preceptorship: A Foundational Chronic Migraine  
Treatment  
Allergan Neuroscience  
Reno, NV  
November 9, 2022

mild® Procedure - Virtual Didactic Physician Training  
Webinar

Vertos Medical  
Reno, NV  
November 9, 2022

“Faceteogenic Lower back Pain : What to know and how to treat?”  
University of Nevada Reno– Echo Project  
Reno, NV  
November 16, 2022

“Common Office Peripheral Nerve Blocks: Techniques & Best  
Practices”  
Pajunk Medical  
Reno, NV  
December 1, 2022

Peripheral Nerve Stimulation vs Dorsal Root Ganglion Stimulation –  
Panel  
Advanced Practice Providers Course  
American Society of Pain and Neuroscience Innovation Summit  
And Data Reveal  
Las Vegas, NV  
December 9, 2022

PILD vs interspinous Spacer - Panel  
Advanced Practice Providers Course  
American Society of Pain and Neuroscience Innovation Summit  
And Data Reveal  
Las Vegas, NV  
December 9, 2022

“Topics In Neuromodulation”  
American Society of Pain and Neuroscience Innovation Summit  
And Data Reveal  
Abbott Neuromodulation  
Las Vegas, NV  
December 9, 2022

PILD Cadaver Physician Training - Proctor  
North American Neuromodulation Society Annual Meeting  
Las Vegas, NV  
January 12, 2023

“Topics In Neuromodulation”  
North American Neuromodulation Society Annual Meeting  
Abbott Medical  
Las Vegas, NV



January 13, 2023

“Portfolio of Migraine Treatments”  
Abbvie Pharmaceutical  
Vacaville, CA  
January 26, 2023

“12 Step Program For Opioid Prescribing”  
University of Nevada Reno– Echo Project  
Reno, NV  
February 1, 2023

Chronic Migraine Preceptorship: A Foundational Chronic Migraine  
Treatment  
Allergan Neuroscience  
Reno, NV  
February 8, 2023

AIS Pharmacy Experience (APEX) - Faculty  
AIS Healthcare  
Dallas, TX  
February 11, 2023

“Pain Management and Alternatives to Managing Chronic Pain”  
University of Nevada Reno– Echo Project  
Reno, NV  
February 15, 2023

Abbott Spinal Cord Stimulation Peer-to-Peer Program - Proctor  
Abbott Neuromodulation  
Reno, NV  
February 17, 2023

Abbott Spinal Cord Stimulation Peer-to-Peer Program - Proctor  
Abbott Neuromodulation  
Reno, NV  
February 24, 2023

Sierra Spine Society Winter Symposium- Faculty  
Mammoth, CA  
March 3 - 5, 2023

“Portfolio of Migraine Treatments”  
Abbvie Pharmaceutical  
Reno, NV  
March 7, 2023

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
March 17, 2023

Chronic Migraine Local Live – Botox: A First-Choice Treatment in  
Chronic Migraine  
Abbvie Neurosciences  
Walnut Creek, CA  
April 26, 2023

“Opioid Weaning Protocols”  
University of Nevada Reno– Echo Project  
Reno, NV  
May 3, 2023

Accelerator Module 2 Course – National Fellows DRG Course  
Abbott Neuromodulation  
Austin, TX  
May 6 -7, 2023

“Complex Regional Pain Syndrome vs Causalgia”  
University of Nevada Reno– Echo Project  
Reno, NV  
May 17, 2023

“Advanced Practice Practitioner Models”  
Pacific Spine and Pain Society  
Webinar  
Reno, NV  
May 18, 2023

“Advanced Practice Practitioner Scope of Practice”  
Pacific Spine and Pain Society  
Webinar  
Reno, NV  
May 18, 2023

AIS Pharmacy Experience (APEX) - Faculty  
AIS Healthcare  
Dallas, TX  
May 20, 2023

“Portfolio of Migraine Treatments”

Abbvie Pharmaceutical  
Reno, NV  
May 23, 2023

Minimally Invasive Spine Lab – Faculty  
Pacific Spine and Pain Society  
Westminster, CO  
June 3, 2023

Diabetic Peripheral Neuropathy and Neuromodulation  
Abbott Neuromodulation  
Reno, NV  
June 6, 2023

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
June 13, 2023

“Topics In Neuromodulation”  
American Society of Pain and Neuroscience Annual Meeting  
Abbott Neuromodulation  
Miami, FL  
July 14, 2023

“Advancements in Minimally Invasive Techniques for Spinal Stenosis”  
Panel Speaker  
American Society of Pain and Neuroscience Annual Meeting  
Miami, FL  
July 14, 2023

National Virtual Patient Education Program  
Abbott Neuromodulation  
Reno, NV  
July 19, 2023

Vertos Cadaver Usability Lab  
Vertos Medical  
New Port Beach, CA  
July 29, 2023

“What a Pain In the Butt: Sacroiliac Joint Dysfunction”  
University of Nevada Reno– Echo Project  
Reno, NV  
August 2, 2023

“Ablate vs Stimulate” – Moderator  
Advanced Practice Practitioner Webinar  
Pacific Spine and Pain Society  
Reno, NV  
August 2, 2023

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
August 4, 2023

”Too Much is Not a Good Thing: Overuse Syndrome”  
University of Nevada Reno– Echo Project  
Reno, NV  
August 16, 2023

mild® Procedure - Virtual Didactic Physician Training  
Webinar  
Vertos Medical  
Reno, NV  
August 29, 2023

“Expanding Access to Care”  
Abbott Neuromodulation  
Honolulu, HI  
September 6, 2023

SI Joint Fusion Demonstration  
Pacific Spine and Pain Society Annual Meeting Lab  
O'ahu Ko'Olina, O'Ahu, HI  
September 7, 2023

MIS vs Open Spinal Procedures – Panel  
Pacific Spine and Pain Society Annual Meeting APP Course  
O'ahu Ko'Olina, O'Ahu, HI  
September 7, 2023

“Pain Management Medication Guidance: Non-opioids vs Opioids”  
Pacific Spine and Pain Society Annual Meeting APP Course  
O'ahu Ko'Olina, O'Ahu, HI  
September 7, 2023

“How to Grow Your Practice. Trends of the 2020s”  
Pacific Spine and Pain Society Annual Meeting

O'ahu Ko'Olina, O'Ahu, HI  
September 8, 2023

Sacroiliac Joint Fusion, Lateral & Posterior Approach Debate – Panel  
Pacific Spine and Pain Society Annual Meeting  
O'ahu Ko'Olina, O'Ahu, HI  
September 8, 2023

“Portfolio of Migraine Treatments”  
Abbvie Pharmaceutical  
Reno, NV  
September 12, 2023

mild® Procedure - Virtual Didactic Physician Training  
Webinar  
Vertos Medical  
Reno, NV  
September 26, 2023

“Powerful Migraine Prevention”  
Lundbeck Pharmaceutical  
Reno, NV  
September 28, 2023

“Orientation to Project ECHO”  
Anthem Pain Management ECHO  
Reno, NV  
October 11, 2023

AIS Pharmacy Experience (APEX) - Faculty  
AIS Healthcare  
Dallas, TX  
October 14, 2023

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
November 1, 2023

“How to Market Yourself”. Trends of the 2020s”  
Pacific Spine and Pain Society – LIT Webinar  
Reno, NV  
November 6, 2023

“CDC Guidelines for Opiate Prescribing”

Anthem Pain Management ECHO  
Reno, NV  
November 8, 2023

Abbott Virtual DRG-CRPS Patient Advocacy Presentation  
Abbott Neuromodulation  
Reno, NV  
November 8, 2023

TransLoc Physician Training – Faculty  
CornerLoc  
Reno, NV  
November 9, 2023

PainTEQ Physician Training – Faculty  
PainTEQ  
Scottsdale, AZ  
November 11, 2023

"Role of Tramadol in Pain Management"  
University of Nevada Reno– Echo Project  
Reno, NV  
November 15, 2023

“12 Steps to Proper Opiate Prescribing: Opiates, Benzos, &  
More”  
Anthem Pain Management ECHO  
Reno, NV  
November 22, 2023

Chronic Migraine – Expert on Demand  
Webinar  
Allergan Neurosciences  
Reno, NV  
November 22, 2023

Vertos Physician Round Table Dinner  
Vertos Medical  
Chico, CA  
November 28, 2023

### **Advanced Professional Development Courses**

University of Southern Florida School of Medicine Clinical  
Update: Botulinum Toxin Type A in the Treatment of

Back Pain and Muscle Spasm,  
Minneapolis, MN.  
August 23, 2003

University of Minnesota School of Medicine Neurotoxin  
Injection Seminar  
Minneapolis, MN.  
February 12, 2005

American Academy of Physical Medicine and Rehabilitation  
Annual Assembly Meeting  
Philadelphia, PA.  
October 27 – 29, 2005

Fifteenth Annual Mayo Clinic Symposium on Sports Medicine  
Rochester, MN.  
November 4 – 5, 2005

American Academy of Pain Medicine  
Annual Assembly Meeting  
San Diego, CA  
February 22 – 25, 2006

Fundamentals of Diagnostic Musculoskeletal Ultrasound With  
An In-Depth Focus on Shoulder Examination  
American Academy of Physical Medicine and Rehabilitation  
Annual Assembly Meeting  
Honolulu, HI  
November 8, 2006

American Academy of Physical Medicine and Rehabilitation  
Annual Assembly Meeting  
Honolulu, HI  
November 9 – 12, 2006

American Academy of Physical Medicine and Rehabilitation  
Billing and Coding Workshop  
Boston, MA  
September 25 – 26, 2007

American Academy of Physical Medicine and Rehabilitation  
Annual Assembly Meeting  
Boston, MA  
September 27 – 30, 2007

International Spine Interventional Society

Annual Assembly Meeting  
Las Vegas, NV  
July 23 – 26, 2008

American Academy of Physical Medicine and Rehabilitation  
Billing and Coding Workshop  
San Diego, CA  
November 18 – 19, 2008

American Academy of Physical Medicine and Rehabilitation  
Annual Assembly Meeting  
San Diego, CA  
November 20 – 23, 2008

American Academy of Physical Medicine and Rehabilitation  
Billing and Coding Workshop  
Austin, TX  
November 20 – 21, 2009

American Academy of Physical Medicine and Rehabilitation  
Annual Assembly Meeting  
Austin, TX  
October 22 – 25, 2009

The 17<sup>th</sup> Napa Pain Conference  
Napa, California  
August 13 – 15, 2010

North American Neuromodulation Society  
Annual Assembly Meeting  
Las Vegas, NV  
December 2 – 5, 2010

The 18<sup>th</sup> Napa Pain Conference  
Napa, California  
September 16 – 18, 2011

American Academy of Physical Medicine and Rehabilitation  
Billing and Coding Workshop  
Orlando, FL  
November 15 – 16, 2012

American Academy of Physical Medicine and Rehabilitation  
Annual Assembly Meeting  
Orlando, FL  
November 17 – 20, 2011



North American Neuromodulation Society  
Annual Assembly Meeting  
Las Vegas, NV  
December 8 - 11, 2011

Society of Diagnostic Medical Sonography  
Introduction to Musculoskeletal Ultrasound imaging  
June 3, 2012

International Spine Interventional Society  
Annual Assembly Meeting  
Las Vegas, NV  
July 17– 22, 2012

American Academy of Physical Medicine and Rehabilitation  
Billing and Coding Workshop  
Atlanta, GA  
November 12 – 13, 2012

American Academy of Physical Medicine and Rehabilitation  
Annual Assembly Meeting  
Atlanta, GA  
November 14 – 17, 2012

West Virginia Society of Interventional Pain Physicians  
Pain, 2013  
West Palm Beach, FL  
July 11 -14, 2013

Allergan Neuroscience Speaker Training Meeting  
Annual Speaker Training Meeting  
San Diego, CA  
February 7 – 9, 2014

West Virginia Society of Interventional Pain Physicians  
Pain, 2014  
San Juan, Puerto Rico  
June 19 - 22, 2014

Society for Pain Practice Management  
Billing, Coding, and Practice Management Course  
San Diego, CA  
August 13 - 14, 2014

Allergan Neuroscience Speaker Training Meeting

Annual Speaker Training Meeting  
Dallas, TX  
March 27 - 28, 2015

International Neuromodulation Society 12<sup>th</sup> World Congress  
Bi-Annual Assembly Meeting  
Montreal, Canada  
June 7 - 11, 2015

16<sup>th</sup> Annual Pain Management Billing, Coding & Compliance  
Summit  
Decision Health  
Las Vegas, NV  
September 14 – 16, 2015

North American Neuromodulation Society  
Annual Assembly Meeting  
Las Vegas, NV  
December 10 - 13, 2015

Allergan Neuroscience Speaker Training Meeting  
Annual Speaker Training Meeting  
Dallas, TX  
January 22 - 23, 2016

West Virginia Society of Interventional Pain Physicians  
Pain, 2016  
Nassau, Bahamas  
July 22 - 24, 2016

St Jude Medical Speaker Training Meeting  
Phoenix, AZ  
October 6 - 7, 2016

Becker's ASC 23<sup>rd</sup> Annual Meeting: The Business and  
Operations of ASC's  
Chicago, IL  
October 27 – 29, 2016

Society for Pain Practice Management  
Billing and Practice Management Course  
Scottsdale, AZ  
November 3 – 4, 2016

North American Neuromodulation Society  
Annual Assembly Meeting

Las Vegas, NV  
January 19 - 22, 2017

Abuse Deterrent Technology  
A Case Based Learning Program for Interventional Pain  
Specialists  
San Francisco, CA  
March 10 – 11, 2017

Allergan Neuroscience Speaker Training Meeting  
Annual Speaker Training Meeting – Chronic Migraine  
Denver, CO  
April 7 - 8, 2017

International Neuromodulation Society 13<sup>th</sup> World Congress  
Bi-Annual Assembly Meeting  
Edinburgh, Scotland  
May 27 – June 1, 2017

Allergan Neuroscience Speaker Training Meeting  
Annual Speaker Training Meeting – Neuro Rehabilitation  
Denver, CO  
June 16 - 17, 2017

Vertiflex Superior Training Course  
Dallas, Texas  
July 8, 2017

2017 Advanced Specialty Coding, Compliance and  
Reimbursement Symposium  
Decision Health  
Las Vegas, NV  
October 2 - 4, 2017

Becker's ASC 24<sup>th</sup> Annual Meeting: The Business and  
Operations of ASC's  
Chicago, IL  
October 26 – 28, 2017

North American Neuromodulation Society  
Annual Assembly Meeting  
Las Vegas, NV  
January 11 - 14, 2018

Silex Sacroiliac Joint Fusion Cadaver Training Lab  
Las Vegas, NV

March 3, 2018

Allergan Neuroscience Speaker Training Meeting  
Annual Speaker Training Meeting – Chronic Migraine  
Dallas, TX  
March 23 - 24, 2018

CornerLoc Sacroiliac Joint Fusion Cadaver Training Lab  
Tulsa, OK  
April 21, 2018

The Intracept Procedure Cadaver Training Lab  
Relieva Medsystems  
Fort Worth, TX  
May 19, 2018

Amgen and Novartis Neuroscience Speaker Training Webcast  
Annual Speaker Training – Chronic Migraine  
May 24, 2018

West Virginia Society of Interventional Pain Physicians  
Pain, 2018  
Miami, Florida  
June 1- 3, 2018

Becker's ASC 25<sup>th</sup> Annual Meeting: The Business and  
Operations of ASC's  
Chicago, IL  
October 18 – 20, 2018

California Society of Interventional Pain Physicians  
9<sup>th</sup> Annual Conference  
Santa Barbara, California  
November 2 – 4, 2018

North American Neuromodulation Society  
Annual Assembly Meeting  
Las Vegas, NV  
January 17 - 20, 2019

Allergan Neuroscience Speaker Training Meeting  
Annual Speaker Training Meeting – Chronic Migraine  
Dallas, TX  
March 22 - 23, 2019

AIS Advisory Board Meeting

AIS Healthcare  
Dallas, TX  
April 29, 2019

International Neuromodulation Society 14<sup>th</sup> World Congress  
Bi-Annual Assembly Meeting  
Sydney, Australia  
May 25 – 30, 2019

The American Society of Pain and Neurosciences (ASPN)  
Pain, 2019  
Miami Beach, Florida  
June 26 - 28, 2019

Nevada Opioid Abuse Prevention Summit  
Las Vegas, Nevada  
August 14 – 15, 2019

Napa Pain Conference  
26<sup>th</sup> Annual  
Napa, California  
August 15 – 18, 2019

California Society of Interventional Pain Physicians  
10<sup>th</sup> Annual Conference  
Squaw Valley, Lake Tahoe, California  
October 25 - 27, 2019

AIS Advisory Board Meeting  
AIS Healthcare  
Dallas, TX  
December 16, 2019

Ubrelvy Speaker Training  
Allergan Neurosciences  
Denver, CO  
January 17 - 18, 2020

North American Neuromodulation Society  
Annual Assembly Meeting  
Las Vegas, NV  
January 23 - 26, 2020

Society for Pain Practice Management  
Billing, Coding, and Practice Management Course  
Las Vegas, NV

February 20 - 22, 2020

AIS Advisory Board Meeting  
Webinar  
AIS Healthcare  
Dallas, TX  
April 27, 2020

ViaDisc Virtual Master's Certification Course  
Vivex Medical  
Reno, NV  
June 16, 2020

Amgen and Novartis Neuroscience Speaker Training Webcast  
Annual Speaker Training – Chronic Migraine  
Reno, NV  
June 18, 2020

Lundbeck Web Based Speaker Training  
Lundbeck Pharmaceuticals  
Reno, NV  
August 22, 2020

Spinal Simplicity Minuteman System Cadaver Lab  
Spinal Simplicity  
Reno, NV  
September 26, 2020

AIS Advisory Board Meeting  
Webinar  
AIS Healthcare  
Reno, NV  
October 4, 2020

Pain Management: Virtual Coding Summit  
Webinar  
Decision Health  
Reno, NV  
November 17 -19, 2020

Ubrelvy Speaker Training Webcast  
Allergan Neurosciences  
Reno, NV  
January 8, 2021

Society for Pain Practice Management

Billing, Coding, and Practice Management Webcast  
Reno, NV  
January 20 - 22, 2021

SurGenTec Cadaveric Lab Training  
SurGenTec  
Tampa Bay, FL  
February 13, 2021

Zip Bioskills Education Course  
Aurora Pain Care  
Dallas, TX  
February 21-22, 2021

Amgen and Novartis Neuroscience Speaker Training Webcast  
Annual Speaker Training – Chronic Migraine  
Reno, NV  
February 24, 2021

Allergan Neuroscience Speaker Training Webcast  
Annual Speaker Training – Chronic Migraine  
Reno, NV  
March 19-20, 2021

Pacific Spine & Pain Society: Minimally Invasive Spine,  
Neurotomy, and Neuromodulation Workshop  
Las Vegas, NV  
April 10, 2021

Biotronik – NRO Usability Lab  
Biotronik Medical  
Portland, OR  
April 17, 2021

SpineJack Training Webinar  
Stryker Medical  
Reno, NV  
May 3, 2021

Lundbeck Web Based Speaker Training  
Lundbeck Pharmaceuticals  
Reno, NV  
May 8, 2020

Abbott DRG Advisory Board Meeting  
Abbott Medical

Austin, TX  
May 15 -16, 2021

Pacific Spine and Pain Society (PSPS) Minimally Invasive  
Spine and Regenerative Medicine Workshop  
Seattle, WA  
May 22, 2021

AIS Advisory Board Meeting  
Webinar  
AIS Healthcare  
Reno, NV  
June 14, 2021

The American Society of Pain and Neurosciences (ASPN)  
Pain, 2021  
Miami Beach, Florida  
July 22 - 25, 2021

Pacific Spine and Pain Society (PSPS) 2021 Annual Conference  
Advanced Practice Practitioner Course Director  
Las Vegas, NV  
September 10, 2021

Pacific Spine and Pain Society (PSPS) 2021 Annual Conference  
Las Vegas, NV  
September 10 - 12, 2021

Ubrelyv and Atogepant Virtual Speaker Training  
Abbvie Neurosciences  
Reno, NV  
October 8, 2021

ReActiv8 Physician Certification Program: Course 1 –  
Clinical Application of ReActiv8  
Webinar  
Reno, NV  
October 21, 2021

ReActiv8 Physician Certification Program: Course 2 –  
Patient Profile Roundtable  
Webinar  
Reno, NV  
October 12, 2021

ReActiv8 Physician Certification Program: Course 3 –



Cadaver Workshop  
San Diego, CA  
November 13, 2021

Amgen Neuroscience Speaker Training Webcast  
Annual Speaker Training – Chronic Migraine  
Reno, NV  
December 16, 2021

The American Society of Pain and Neurosciences (ASPN)  
Innovation Summit  
Las Vegas, NV  
January 7 - 8, 2022

North American Neuromodulation Society  
Annual Assembly Meeting  
Orlando, FL  
January 13 – 16, 2022

Society for Pain Practice Management  
Billing, Coding, and Practice Management Webcast  
Reno, NV  
January 19 - 21, 2022

Aurora SILO Training Cadaver Lab  
Aurora Spine  
Reno, NV  
February 12, 2022

Pacific Spine & Pain Society Neurostimulation Lab  
Scottsdale, AZ  
February 19, 2022

AIS Advisory Board Meeting  
AIS Healthcare  
Dallas, TX  
February 27, 2022

Abbvie Neuroscience Speaker Training Webcast  
Annual Speaker Training – Chronic Migraine  
Reno, NV  
May 10, 2022

Lundbeck Web Based Speaker Training  
Lundbeck Pharmaceuticals  
Reno, NV

June 13, 2022

Vertos Medical Advisory Board Meeting  
Vertos Medical  
White Sulfer Springs, WV  
June 24 – 26, 2022

The American Society of Pain and Neurosciences (ASPN)  
Pain, 2022  
Miami Beach, Florida  
July 14 - 17, 2022

Advanced Practice Provider Course – Course Director  
Pacific Spine and Pain Society (PSPS) 2022 Annual Conference  
Last Vegas, NV  
September 16, 2022

Pacific Spine and Pain Society (PSPS) 2022 Annual Conference  
Last Vegas, NV  
September 16 - 18, 2022

TransLoc Physician Training Course  
Reno, NV  
November 15, 2022

American Society of Pain and Neuroscience Innovation Summit  
And Data Reveal  
Las Vegas, NV  
December 9 – 10, 2022

North American Neuromodulation Society  
Annual Assembly Meeting  
Las Vegas, NV  
January 12 – 15, 2023

AIS Advisory Board Meeting  
AIS Healthcare  
Dallas, TX  
February 12, 2023

Abbvie Neuroscience Speaker Training Webcast  
Annual Speaker Training – Chronic Migraine  
Reno, NV  
March 16, 2023

Abbvie Neuroscience Advisory Board Meeting

Abbvie Neuroscience  
San Francisco, CA  
March 30, 2023

SI Bone Physician Training Course  
Reno, NV  
May 4, 2023

Abbott Neuromodulation Commercial Advisory Board Meeting  
Abbott Neuromodulation  
Miami, FL  
July 12, 2023

Vertos Commercial Advisory Board Meeting  
Vertos Medical  
Miami, FL  
July 13, 2023

The American Society of Pain and Neurosciences (ASPN)  
Pain, 2023  
Miami Beach, Florida  
July 13 - 16, 2023

Advanced Practice Provider Course – Course Director  
Pacific Spine and Pain Society (PSPS) 2022 Annual Conference  
O'ahu Ko'Olina, O'Ahu, HI  
September 6, 2023

Pacific Spine and Pain Society (PSPS) 2023 Annual Conference  
O'ahu Ko'Olina, O'Ahu, HI  
September 6 - 9, 2023

Lundbeck Web Based Speaker Training  
Lundbeck Pharmaceuticals  
Reno, NV  
October 2, 2023

AIS Advisory Board Meeting  
AIS Healthcare  
Dallas, TX  
October 15, 2023

Saluda SENSE Summit  
Saluda Medical  
Scottsdale, AZ  
October 20 – 22, 2023

International Society of Pain and Neuroscience (ISPN)  
Inaugural Meeting  
Dubia, UAE  
December 8 – 9, 2023