# Michael Anthony Gallizzi MD, MS, FAAOS

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TRAINING/EDUCATION	
<b>Duke University; Department of Orthopaedics Adult Spinal Surgery</b> (Clinical Instructor) Durham, NC	2014-2015
University of Missouri; Department of Orthopaedics (Steve Olson MD Resident Research Award Winner 2014) Columbia, MO	2009-2014
Rosalind Franklin University of Medicine and Science; The Chicago Medical School (M.D. with Distinction in Research and John Sheinin Research Award Winner 2009) North Chicago, IL	2005-2009
Rosalind Franklin University of Medicine and Science; (M.S. Healthcare Management) North Chicago, IL	2004-2006
Rosalind Franklin University of Medicine and Science; (Certificate in Applied Physiology) North Chicago, IL	2003-2004
<b>The University of Michigan;</b> (B.S. Economics and a Minor Classical Archeology) Ann Arbor, MI	1999-2003
Board Certified Orthopedic Surgeon (ABOS)  Board Certified Orthopedic Surgeon (ABOS)	2018-2028
SPECIAL CERTIFICATIONS Globus ExcelsiusGPS Spinal Robot Instructor 1 of 30 in the world	2021-present
Fellow of the American Academy of Orthopaedic Surgery (FAAOS)	2019-Present
Globus ExcelsiusGPS Spinal Robot Certified	2019-Present
Joimax Endoscopic Spinal Surgery Certified	2018-Present
WORK EXPERIENCE	
Robotic/Endoscopic Minimally Invasive Spine Surgeon @ The Steadman Clinic	2022-Present
Co-founder of Anterior Spine Institute for Research and Education (ASPIRE)501c3	2018-Present
Peer Reviewer for Global Spine Journal, Thieme publishing	2012-Present
Consultant and lead design Surgeon for Arthrex Inc.	2014-Present
Consultant Surgeon for Globus Medical Inc	2016-Present
Consultant Surgeon for Medtronic Inc  Michael A. Gallizzi MD MS  Page 1	2016-Present

Consultant Supply Chain for HealthTrust HPG	2017-Present
Guest Lecturer for Denver University Business School	2018-Present
Robotic/Endoscopic Minimally Invasive Spine Surgeon OrthoOne@Skyridge	2020-2022
Orthopaedic and Minimally Invasive Spine Surgeon for Cornerstone Orthopaedics	2018-12/2019
Director of Spine Surgery at Porter Adventist Hospital	2016-2017
Orthopaedic and Minimally Invasive Spine Surgeon at Porter Adventist Hospital, Denver, Co	2016-2018
Clinical Value Transformation Team Spine Service Line Member-Centura Heath	2017-2018
Spine Council Supply Chain Member -Centura Heath	2016-2018
OR Committee Member Porter Adventist Hospital	2016-2018
Reviewer for Evidence-Based Spine-Care Journal; Thieme publishing	2013-2015
Advanced Trauma Life Support Instructor (ATLS) Columbia, MO (Lectures: Spine Trauma 6/13 Spine Trauma 6/12, Abdomen/Pelvis 6/11, Thoracic Cavity 6/10)	2009-2015
Spine Surgeon at Colorado Comprehensive Spine Institute	2015-2016
University of Missouri: Utilization Review Committee Member Columbia, MO	2010-2014
University of Missouri: Strategic Planning Committee for the School of Medicine Committee Member Columbia, MO	2012-2014
The Rehabilitation Institute of Chicago; Center for Pain Studies; Research Assistant Chicago, IL	2005-2009
Rosalind Franklin University of Medicine and Science; Department of Biochemistry; Research Assistant North Chicago, IL	2003-2005
University of Michigan; Department of Chemistry; Research Assistant Ann Arbor, MI	2002- 2003

# PEER-REVIEWED PUBLICATIONS

- 1. Direct Visualization of a S1 medial pedicle breach using a novel endoscope: A Case Report with new endoscopic pedicle breach classification, **MA**, **Gallizzi** Accepted for Publication Duke Othopaedic Journal 2021
- 2. Use of a low thermal injury dissection device reduces local tissue temperature change in a cadaveric model of anterior lumbar interbody fusion, DJ Griffin, JG, Vose, MM, Guirguis, BT, Garland, MA, Gallizzi, Accepted for publication Duke Orthopaedic Journal 2021
- 3. The Impact of Lumbar Spine Disease and Deformity on Total Hip Arthroplasty Outcomes; Brown CR. Blizzard DJ, Sheets CZ, Seyler TM, Penrose CT, Klement MR, Gallizzi MA; Orthopedics; 5/2017; 40(3) e520-e525
- 4. Bailout screw placement in the posterior subaxial cervical spine: is a spinolaminar screw a viable option? Tyler Jenkins, Craig Kuhns, Theodore Choma, **Michael Gallizzi**, Ferris Pfeiffer: J Spine Care, 2016 Vol. 1(1): 1-4

- 5. Renal Vein Laceration During Lateral Interbody Fusion (LIF). Blizzard DJ, **Gallizzi MA**, Brown CR. Jounnal of Neurogurgey: Spine 25 (4), 464-466
- 6. Interval Effect of Prone Repositioning for Posterior Spinal Instrumentation after Lateral Interbody Fusion. DJ Blizzard, TJ Vovos, **MA Gallizzi**, C Sheets, RE Isaacs, EW Reiser, CR Brown; Journal of Spine & Neurosurgery 2016, 5:1
- 7. C5 Nerve Palsy in Posterior Cervical Spinal Surgery: Does Width of Laminectomy Matter? Klement MR, Kleeman LT, Blizzard DJ, **Gallizzi MA**, Eure M, Brown CR. Spine J. 2015 Jul 21.
- 8. Sagittal Balance Correction in Lateral Interbody Fusion for Degenerative Scoliosis. Daniel J Blizzard, **Michael A Gallizzi**, Charles Sheets, Benjamin T Smith, Robert E Isaacs, Megan Eure, Christopher R Brown, Int J Spine Surg. 2016; 10: 29
- 9. The role of iatrogenic foraminal stenosis from lordotic correction in the development of C5 palsy after posterior laminectomy and fusion. Daniel J Blizzard, **Michael A Gallizzi**, Charles Sheets, Mitchell R Klement, Lindsay T Kleeman, Adam M Caputo, Megan Eure, Christopher R Brown, *Journal of Orthopaedic Surgery and Research*2015**10**:160
- 10. Lumbar Spine Disease Negatively Effects Outcomes After Total Hip Arthroplasty Blizzard DJ, Penrose CT, Sheets C, Seyler TM, Bolognesi MP, Klement MR, Bala A, Gallizzi MA, Brown CR The Spine Journal, Volume 15, Issue 10, S154
- 11. Quantification of fall and fracture rates in patients with myelopathy, Blizzard DJ, **Gallizzi MA**, Sheets C, Penrose CT, Isaacs RE, Eure M, Brown CR San Diego, CA CSRS-2015
- 12. Ankylosing Spondylitis Increases Peri- and Post-operative Complications After Total Hip Arthroplasty, Blizzard DJ, Penrose CT, Sheets C, Seyler TM, Bolognesi MP, Brown CR. <u>J Arthroplasty</u>. 2017 Aug;32(8):2474-2479. doi: 10.1016/j.arth.2017.03.041. Epub 2017 Mar 27
- 13. Quantification of fall and fracture rates in patients with Parkinson's Disease, Sheets C, Blizzard DJ, Gallizzi MA, Penrose CT, Isaacs RE, Eure M, Brown CR. [Under construction —Parkinsonism & Related Disorders]
- 14. Radiographic Predictors of C5 Palsy Following Multilevel Cervical Laminectomy and Fusion. **Blizzard DJ**, Gallizzi MA, Sheets C, Klement MR, Kleeman LT, Eure M, Brown CR. Orthop Surg Res. 2015 Oct 6;10(1):160.
- 15. The Fall and Fracture Risk of Medicare Patients with Cervical Myelopathy.
  Blizzard DJ, Gallizzi MA, Sheets C, Penrose CT, Isaacs RE, Brown CR. [Prepared for submission— Journal of Orthopaedic Trauma]
- 16. Prognostic indicators for Failed Back Surgery using psychometrics and pain medication usage. **Gallizzi, MA,** Gagnon, CM, Stanos, S, Blizzard, DJ; Duke Orthopaedic Journal 2015
- 17. Cervical spine injuries in sports; Lindsay T. Kleeman MD, **Michael A. Gallizzi MD MS**, Daniel J Blizzard MD MS, Melissa M. Erickson MD, Duke Orthopaedic Journal 2015
- 18. Current trends in the management of lumbar spine injuries in athletes, **Michael A. Gallizzi MD MS**, Lindsay T. Kleeman MD, Daniel J Blizzard MD MS, Melissa M. Erickson MD, Duke Orthopaedic Journal 2015
- 19. Posterior Single-Incision Semitendinosus Harvest for a Quadrupled Anterior Cruciate Ligament Graft Construt: Determination of Graft Length and Diameter Based on Patient Sex, Height, Weight, and Body Mass Index; Nuelle, CW, Cook JL, **Gallizzi MA**, Smith, PA; Arthroscopy. 2014 Dec 15
- 20. Is Polymethyl Methacrylate a Viable Option for Salvaging Later Mass Screw Failure in the Subaxial Cervical Spine? **Gallizzi, MA**, Kuhns, CA, Jenkins, TJ, Pfeiffer, FM; Global Spine Journal, 2014; DOI: 10.1055/s-0034-1394127
- 21. Use of a Medication Quantification Scale for Comparison of Pain Medication Usage in Patients with Complex Regional Pain Syndrome (CRPS); **Gallizzi, MA**, Khazai, RS, Gagnon, CM, Bruehl, S, and Harden, RN; Pain Medicine. 2014 Sept 15
- 22. Does a Syrinx Matter for Return to Play in Contact Sports? A Case Report and Evidence-Based Review of Return-toPlay Criteria After Transient Quadriplegia; Milles, JL, **Gallizzi, MA**, Sherman, S, Smith, PA; Choma, TJ; *Sports Health: A Multidisciplinary Approach July 25, 2014*

- 23. "Residual Limbs of Amputees are Significantly Cooler than Contralateral Intact Limbs" R. Norman Harden MD, Christine M. Gagnon PhD; **Michael Gallizzi MS,** Anjum S. Khan, MD; Devon Newman, MS; Pain Practice, 2008 Sep-Oct;8(5):342-7
- 24. "Medication Quantification Scale Version III: Internal Validation of Detriment Weights Using a Chronic Pain Population." Michael Gallizzi MS, Christine M.Gagnon PhD, R. Norman Harden MD, Steven Stanos DO, and Anjum Khan MD Center for Pain Studies, Rehabilitation Institute of Chicago, Northwestern University, Chicago, Illinois; Pain Practice 2008 Mar;8(1):1-4
- 25. "Prospective, randomized, single-blind, sham treatment-controlled study of the safety and efficacy of an electromagnetic field device for the treatment of chronic low back pain: a pilot study"; Harden RN, Remble TA, Houle TT, Long JF, Markov MS, **Gallizzi MA**. Center for Pain Studies, Rehabilitation Institute of Chicago, Northwestern University, Chicago, Illinois; Pain Practice 2007 Sep;7(3):248-55

## **BOOK CHAPTERS**

1. Lumbar spine injuries in athletes. **Gallizzi, MA**, Kleeman, LT, Melissa Erickson, Sports Medicine for the Orthopedic Resident, World Scientific Publishing Co Inc, pages 13-27, 2016

#### **PAPER PRESENTATIONS**

- 1. Use of A Low-Thermal Injury Dissection Device Reduces Tissue Temperature Change in Anterior Lumbar Interbody Fusion Spine Surgery Darvin J. Griffin, **Michael A. Gallizzi, MD, MS**, Joshua G. Vose, MD, Brandon T. Garland MD, North American Spine Society Annual Meeting, Los Angeles, CA Sept, ,2018; Podium Presentation
- 2. Ankylosing Spondylitis Increases Peri- and Post-operative Complications After Total Hip Arthroplasty Blizzard DJ, Penrose CT, **Gallizzi MA**, Sheets C, Klement MR, Seyler TM, Bolognesi MP, Brown CR. American Academy of Orthopaedic Surgery83<sup>rd</sup> Annual Meeting, Orlando, FL. March 2016. Podium presentation.
- The Fall and Fracture Risk of Medicare Patients with Cervical Myelopathy. Blizzard DJ, **Gallizzi MA**, Sheets C, Penrose CT, Isaacs RE, Brown CR. Cervical Spine Research Society 43rd Annual Meeting, San Diego, CA. December 2015. Podium presentation.
- 4. Cervical Myelopathy Doubles the Rate of Dislocation and Fracture After Total Hip Arthroplasty (THA)Klement MR, Blizzard DJ, Penrose CT, Sheets C, Seyler TM, **Gallizzi MA**, Bolognesi MP, Isaacs RE, Brown CR. American Association of Hip and Knee Surgeons 25<sup>th</sup> Annual Meeting, Dallas, Tx. November 2015.
- 5. Lumbar Spine Disease Negatively Effects Outcomes After Total Hip Arthroplasty. Blizzard DJ, Penrose CT, Sheets C, Seyler TM, Bolognesi MP, Klement MR, Bala A, **Gallizzi MA**, Brown CR, North American Spine Society's 30th Annual Meeting, Chicago, IL. October 2015. Podium presentation.
- 6. C5 Nerve Palsy in Posterior Cervical Spinal Surgery: Does Width of Laminectomy Matter? Kleeman LT, Klement MR, Blizzard DJ, **Gallizzi MA**, Brown CR. North American Spine Society's 30th Annual Meeting, Chicago, IL. October 2015.
- 7. Sagittal Balance And Lordosis Correction In Lateral Interbody Fusion. Blizzard DJ, **Gallizzi MA**, Sheet C, Eure M, Isaacs RE, Brown CR. Southern Orthopaedic Association Annual Meeting. July 15-18<sup>th</sup>, 2015. Asheville, NC. CA. Podium presentation.
- 8. The Role Of Increased Lordotic Correction In Post-Operative C5 Palsy. Blizzard DJ, **Gallizzi MA**, Sheets C, Eure M, Klement MR, Kleeman LT, Brown CR. Eastern Orthopaedic Association 46<sup>th</sup> Annual Meeting, Maui, HI. June 2015
- 9. Interval Effect of Prone Repositioning for Posterior Spinal Fusion After XLIF; Daniel Blizzard MD, MS; **Michael Gallizzi MD, MS**; Charles Sheets PT; Christopher Brown MD; SOLAS in San Diego, CA USA | April 18, 2015
- 10. Sagittal balance and lumbar lordosis correction in XLIF; Daniel Blizzard MD, MS; **Michael Gallizzi MD, MS**; Charles Sheets PT; Christopher Brown MD; SOLAS in San Diego, CA USA | April 18, 2015

- 11. Renal artery injury during XLIF; Daniel Blizzard MD, MS; **Michael Gallizzi MD, MS**; Christopher Brown MD; SOLAS in San Diego, CA USA | April 18, 2015
- 12. Sagittal balance and lordosis correction in lateral interbody fusion. **Blizzard DJ**, Gallizzi MA, Sheets C, Brown CR. OREF/ORS Southeast Regional Resident Research Symposium. October 2014.
- 13. Salvaging Failed Lateral Mass Screw Fixation in the Subaxial Cervical Spine (C3-C7) with Bone Cement, Kuhns, CA and **Gallizzi, MA**; MidAmerican Orthopaedic Associations 31<sup>st</sup> Annual Meeting ,April 17-21, 2013, Amelia Island, Florida

# **PUBLISHED ABSTRACTS**

- "International Comparison of Prescribing Practices for Complex Regional Pain Syndrome (CRPS): A Practical Application of the Internally Validated Medication Quantification Scale III(iMQSIII) "; Michael Gallizzi, Stephen Bruehl, Melissa Chont, Christine M. Gagnon, Joseph R. Graciosa, R. Norman Harden; PM&R; September 2009 (Vol. 1, Issue 9, Supplement, Page S218)
- 2. "Retrospective comparison of failed back surgery and chronic low back pain patients using psychometrics and pain medication usage patterns"; **Michael A. Gallizzi, MS**, Christine M. Gagnon, PhD, Geke van der Ende, MS, Steven P. Stanos Jr, DO, and R. Norman Harden, MD; Archives of Physical Medicine and Rehabilitation, Volume 89, Issue 11, Pages e103 e104
- 3. "Case Report: Quantitative Sensory Testing in the Evaluation of Nerve Function in a Patient with Benign Idiopathic Trigeminal Sensory Neuropathy"; R. Egyhazi, C. Gagnon, **M. Gallizzi**, J. Graciosa, R. Harden; Archives of Physical Medicine and Rehabilitation, Volume 89, Issue 11, Pages e78 e78
- 4. "A preliminary examination of potential outcome predictors for an interdisciplinary pain management program."
  Gagnon CM, Stanos S, Rader LR, Gallizzi M, Harden RN. Archives of Physical Medicine and Rehabilitation 2006; 87:E13
- 5. "A preliminary analysis of the role of social support at work and pain intensity for differences in job satisfaction before and after the onset of chronic pain" Melinda L. Scheuer, MS, Christine Gagnon, PhD, **Michael A. Gallizzi, MS**, R. Norman Harden, MD, Lynn Rader, MD, and Steven Stanos, DO. The Journal of Pain, Volume 8, Issue 4, Supplement, Page S82, 2007
- 6. "Relationships of job accommodations, stressors, and sources of support for employed chronic pain patients with job satisfaction." Scheuer, M.L, Gagnon, C.M., van der Ende, G.J., Gallizzi, M., Rader, L, Stanos, S & Harden, R.N.The Journal of Pain, Volume 9, Issue 4, Pages 75 75

# PRESENTED POSTERS

- 1. "Robotic/Endoscopic assisted Sacroiliac Revision Surgery: Technique and Case Series" E-Poster #171, Michael Gallizzi MD, Adam Welker PA, Andrew Meyers MD, SMISS 2021, Las Vegas, NV, Oct 2021
- "Use of a Low-Thermal Injury Dissection Device Reduces Tissue Temperature Change in Anterior Lumbar Interbody Fusion Spine Surgery" Darvin Griffin PhD, Mark Guirguis, Josjua Vose MD MBA, Brandon Garland MD, Michael Gallizzi MD, MS; NASS 2018 annual meeting, Los Angles, CA sept, 2018
- "Interval effect of prone repositioning for posterior spinal fusion after lateral interbody fusion"
   Daniel Blizzard MD, MS; Michael Gallizzi MD, MS; Charles Sheets PT; Christopher Brown MD
   NASS Spine Summit, Snowbird, UT 2/2015
- 4. "Sagital balance and lordosis correction in lateral interbody fusion"
  Daniel Blizzard MD, MS; **Michael Gallizzi MD, MS**; Charles Sheets PT; Christopher Brown MD

- "Radiographic Predictors of C5 Palsy Following Multilevel Cervical Laminectomy and Fusion"
   Daniel Blizzard MD, MS; Michael Gallizzi MD, MS; Charles Sheets PT; Christopher Brown MD
   NASS Spine Summit, Snowbird, UT 2/2015
- 6. Is a wider cervical laminectomy a risk factor for postoperative C5 nerve palsy?Klement, MR, Kleeman, LT, Blizzard, DJ, Gallizzi, M, Eure, M, Brown, CR. SOA, 2015
- 7. "Patient-Specific Implants and Instruments Improved Outcomes of Total Knee Replacement" Conrad Ivie MD; Patrick Probst BS; Amrit Bal; **Michael Gallizzi MD, MS**; B. Sonny Bal MD, MBA, JD Florida, 2013
- 8. "Unexpected Intra-operative Events that Prompt Discontinuation of Pediatric Spinal Deformity Surgery" Sreeharsha V Nandyala, Richard M Schwend, Nigel Price, **Michael Gallizzi**; UMKC SOM, Children's Mercy Hospital, March 2012
- 9. "International Comparison of Prescribing Practices for Complex Regional Pain Syndrome (CRPS): A Practical application of the Medication Quantification Scale III." **Gallizzi MA**, Gagnon C, Gracoisa J, Bruel S, Harden RN (October 2009). Accepted for presentation at the 70th Annual Assembly of the American Academy of Physical Medicine and Rehabilitation. Austin TX
- "Case Report: Nerve recovery in a Patient with Benign Idiopathic Trigeminal Sensory Neuropathy quantified by Quantitative Sensory Testing." Michael Anthony Gallizzi, MS, Joseph Graciosa, BS, Rachel Egyhazi BS, Christine M. Gagnon PhD, and R. Norman Harden, MD. The Midwest Pain Society Annual Meeting Fall 2008; Northwestern University, Chicago, IL \*\*4<sup>th</sup> place\*\*
- "An examination of prognostic indicators for Failed Back Surgery using psychometrics and pain medication usage."
  Michael A. Gallizzi, MS, Christine M. Gagnon, PhD, Geke van der Ende, MS, Steven P. Stanos Jr, DO, and R. Norman Harden, MD; The Midwest Pain Society Annual Meeting Fall 2007; Northwestern University, Chicago, IL
  \*\*5th Place\*\*
- "An Investigation of sympathetic reactivity to a cold pressor challenge in amputees: A comparison of residual limbs to unaffected contralateral limbs"; Kiran Vadada, MD, R. Norman Harden, MD, Christine M. Gagnon, PhD, Michael A. Gallizzi, MS, and Nelson Arnold, MD; The Midwest Pain Society Annual Meeting Fall 2007; Northwestern University, Chicago, IL
- "Injured worker job accommodations, sources of work support, and job satisfaction: Since when was support a bad thing?" Melinda L. Scheuer, MS, Christine Gagnon, PhD, Geke van der Ende, MS, Michael Gallizzi, MS, R. Norman Harden, MD, Lynn Rader, MD, and Steven Stanos, DO; Midwest Pain Society Annual Meeting Fall 2007 at Northwestern University, Chicago, IL
  \*\* 2nd place\*\*
- 14. "An Evaluation of Post-Amputation Limbs using Infrared Telethermography, Temperature Strips and Physical Examination" Anjum S. Khan, MD; R. Norman Harden, MD; Christine Gagnon, PhD; Michael Gallizzi, MS; Todd Kuiken, MD, PhD; American Academy of Physical Medicine and Rehabilitation Annual Assembly, Honolulu, HI 2006

## **PATENTS**

1. System and method for spine ligament reconstruction. Peter Dreyfuss, Michael Gallizzi. US patent App. 14/662, 060, 2015

#### **TEACHING-LECTURES**

- 1. Globus Medical West Coast Sales Meeting San Diego, CA, Oct, 2021
- 2. MERC: Surgical Decision-Making: Advanced MIS Soultions, San Diego, CA, Nov, 2021

- 3. MERC: Advanced Lateral Techniques, Phoenix, AZ, March, 2021
  National teaching instructor for the Globus ExcelsiusGPS robot
- 4. Endoscopic Spine: The Driving Force for Success During the Pandemic December 2020 Elliquence, WebEx
- MERC: ATP/Lateral, Denver, CO, Febuary 2020
   National teaching instructor for Globus on ATPl Spine Surgical Techniques
- 6. **MERC:** Tricks of the Trade, Henderson, NV, April 2019
  National teaching instructor for Globus on Lateral Spine Surgical Techniques
- 7. **MERC: Expandable Technology Applications in Spine Surgery, Denver, CO, Feb 2019**National teaching instructor for Globus on Lateral Spine Surgical Techniques
- 8. Business to Business Marketing in Medical Device, Denver University's Business School, Denver, CO, Jan 2019
  Invited Guest Lecture on the medical device industry
- 9. Business to Business Marketing in Medical Device, Denver University's Business School, Denver, CO, Oct 2018
  Invited Guest Lecture on the medical device industry
- 10. MERC: Surgical Strategies and Approaches for Residents and Fellows, Globus Medical, Boston, MA, Oct, 2018
  National teaching instructor for Globus on Lateral Spine Surgical Techniques
- 11. MERC: Direct Look Lateral and (ATP) Cadaveric Training Program, Globus Medical, Los Angeles, CA, Sept, 2018
  National teaching instructor for Globus on Lateral Spine Surgical Techniques
- 12. MERC: ALIF, ALIF Access Cadaveric Training Program, Globus Medical, Audubon, PA, March, 2018
  National teaching instructor for Globus on Anterior Spine Surgical Techniques
- Globus Medical Audubon, PA Representative 201 Medical Educator, Feb, 2018
   National trainer for Spine Medical Sales Representatives
- 14. Anterior Lumbar Fusion Presenter for Globus Medical's National Sales Meeting, Boca Raton, FL Jan, 2018
  National presenter for the Anterior Lumbar Technique
- 15. MERC: Surgical Strategies and Approaches for Residents and Fellows, Boston, MA, Nov, 2017 Faculty for Lateral Spine surgery and Pedicle Subtraction Osteotomy
- 16. Medtronic Proctorship at Duke University for Plasma Blade Usage in Spinal Surgery, March 2017 Peer to Peer Instruction for Duke Spine Surgeon on benefits for Plasma Blade usage
- 17. **Medtronic Advanced Energy University: Plasma Blade Usage in Spinal Surgery, Sept, 2016** aculty for Advanced Energy dissection tools and Representative training
- 18. **Medtronic Advanced Energy University: Plasma Blade in Anterior Cervical Discectomy and Fusion, June, 2016**Faculty for Advanced Energy dissection tools and Representative training

## **TEACHING- CERTIFIED ON SITE TRAINING**

- 1. National Teaching Instructor with choice of Site Globus Robotics ExcelsiusGPS 2021
- 2. Sky Ridge Medical Center is a National Teaching Site for Attending Spine Surgeons and sales for ATP and Lateral Lumbar Interbody Fusion for Globus Medical Inc. November 2018

- 3. Sky Ridge Medical Center is a National Teaching Site for Attending and sale for spinal use of Aquamantis and Plasma Blade for Medtronic November 2018
- 4. Porter Adventist Medical Center is a National Teaching Site for Attending Spine Surgeons and sales for Anterior Lumbar Interbody Fusion for Globus Medical Inc. March 2018
- 5. Porter Adventist Medical Center is a National Teaching Site for Attending and sale for spinal use of Aquamantis and Plasma Blade for Medtronic Jan 2017