

C U R R I C U L U M V I T A E

Name **H. Francis Farhadi**
DOB August 3, 1973

Contact Information

Wexner Medical Center at The Ohio State University
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Degrees/Certifications

2008, Fellow of the American Association of Neurological Surgeons

2008, Fellow of the Royal College of Surgeons (Canada), Neurosurgery

2006, Ph.D., McGill University

Thesis: *“Evolutionarily conserved non-coding sequences confer transcriptional regulation to the myelin basic protein gene”*

2002, M.D.C.M., McGill University

1996, M.Sc. Public Health,
University of London, UK

1994, B.Sc.(Hon) Physiology, McGill University

Honors Thesis Seminar: *“Cholinergic regulation of neurotrophin synthesis in the rat central nervous system”*

Appointments

01/2010-Present, Assistant Professor, Department of Neurological Surgery, The Ohio State University Wexner Medical Center

07/2009-01/2010, Staff Neurosurgeon, St-Michael's Hospital, University of Toronto

01/2009-07/2009, Spine Surgery Fellow, Department of Neurological Surgery, Jackson Memorial Hospital, University of Miami Leonard M. Miller School of Medicine. Supervisor: Dr. Allan Levi, Professor and Chief, Neurospinal Services.

07/2008-01/2009, Peripheral Nerve Fellow, Division of Plastic and Reconstructive Surgery, Barnes-Jewish Hospital, Washington University School of Medicine. Supervisor: Dr. Susan E. Mackinnon, Professor and Chief.

07/2006-6/2008, Post-Doctoral Fellowship, Laboratory of Dr. Fehlings, Toronto Western Research Institute, Toronto Western Hospital. Research Focus: Transcriptional programming of the myelin basic protein gene following spinal cord injury in the mouse.

07/2002-06/2008, Resident, Division of Neurosurgery, University of Toronto

08/1996-06/2002, MD-PhD Student, McGill University School of Medicine and Division of Neurology and Neurosurgery (Graduate Program in Neurological Sciences), McGill University

Awards and Honors

2017, Sarah Burns, College of Medicine Medical Student Research Scholarship
2017, Connor Gifford, Undergraduate Research Scholarship/ International Research Grant
2017, Certificate of Excellence for Outstanding Achievement in Patient Service 2017, OSUWMC
2017, Peer Collaborator/Mentor, Mandela Fellowship Program
2014, Sayan Manna, OSU Research Scholar Award
2014, Ahmed S. Mohamed (Clinical Fellow), Depuy Synthes Travel Award
2013, Lawrence Mervis MD Teacher of the Year Award, Department of Neurological Surgery, OSUWMC
2007, American College of Surgeons Research Scholarship
2007, American Association of Neurological Surgeons – NREF/DePuy Research Fellowship (<http://www.aans.org/library/Article.aspx?ArticleId=45759>)
2006, Joseph M. West Family Fellowship Award
2004, Nature Reviews Neuroscience Highlights - “Glia: A time code for myelin” - (Vol 5:9)
2004, Faculty of 1000 Biology Citation (“Must Read Article”)
1999, Medical Research Council Doctoral Research Award
1999, Royal Victoria Hospital Research Institute Studentship
1998, Muscular Dystrophy Association of Canada Fellowship
1998, Pharmaceutical Manufacturers Association of Canada - MRC Studentship
1997, Medical Research Council Burroughs Wellcome Research Scholarship
1997, Most Outstanding Research Report, Faculty of Medicine, McGill University
1995, Commonwealth Scholarship - United Kingdom
1994, First Class Honors
1994, Dean's Honor List
1994, Student Research Scholarship, FCAR (Quebec research council)
1992, Duncan Cameron Prize in Physiology, McGill University
1991, Second Prize (Violin), McGill Conservatory of Music Open Competition

Professional Memberships

American Association of Neurological Surgeons
Congress of Neurological Surgeons
Royal College of Surgeons (Canada)
North American Spine Society
American Association of Hand Surgeons

Administrative Positions

2017, Co-Director, 2017 Midwest Spine Symposium, Columbus, OH
2017-Present, Chief, Division of Degenerative and Deformity Spinal Surgery, Department of Neurological Surgery, OSU
2016-Present, Member, OSU Surgical Executive Committee
2015-Present, Associate Medical Director, OSU Comprehensive Spine Center
2014-Present, Director, Neurosurgical Trauma and Neurointensive Program, OSU Dept Neurological Surgery
2014-Present, Neurological Surgery Liaison, Trauma Quality Monitoring Committee, OSU
2014-Present, Member, Clinical Competency Committee, OSU Dept Neurological Surgery
2014-Present, Member, OSU East OR Committee
2013-Present, Member, OSU Physician Faculty Engagement Committee
2012-Present, Co-Chair, Office of Outcomes Research, OSU Comprehensive Spine Center
2012-13, Member, CNS Scientific Program Committee
2011-Present, Director, OSU Comprehensive Spine Center Spinal Fellowship Program
2010-Present, Member, CNS/AANS Peripheral Nerve Task Force
2010-11, Member, Spine Injury Protocol Work Group, OSU Trauma Program
2010-12, Co-chair, Education Work Group, Spine Center Program Planning Work Groups
2010-11, Member, Clinical Resource Utilization Committee, OSU Wexner Medical Center
2006-08, Member, Resident Program Committee, Division of Neurosurgery
1996-02, Member, Faculty of Medicine Scholarships Committee, McGill University
1997-98, Member, University of Toronto Medical Journal
1993-94, Coordinator, Peer Academic Advising, Faculty of Science, McGill University

Editorial Responsibilities

2017, Reviewer, Journal of Neurotrauma
2017, Reviewer, Journal of Neurosurgery: Spine
2017, Reviewer, World Neurosurgery
2017, Reviewer, Journal of Pain Research
1997-98, Member, Editorial Board, University of Toronto Medical Journal

Teaching Experience

May 2011-Present, Director, Annual OSU Department of Neurological Surgery MIS Spine Cadaver Course
2010 - 2015, Moderator, OSU Neurosurgery Residency Program Monthly Journal Club
2004 - 2006, Teaching Assistant, Brain & Behavior Course, University of Toronto Faculty of Medicine
1995 (Spring), Neuroanatomy Laboratory Instructor, Central Nervous System Course, McGill University Faculty of Medicine
1994 (Fall), Teaching Assistant, Human Neuroanatomy Course, Department of Anatomy & Cell Biology, McGill University

Trainees

Clinical Fellows

Rouzbeh Motiei, MD (expected start 2018)
Varun Singh, MBBS (expected start 2018)
Vibhu Viswanathan, MBBS (2016-18)
Sunil Kukreja, MBBS (2015-16)
Ahmed Mohamed, MB/ChB (2014-15)
Sakthivel Rajan, MBBS (2013-14)
Rupesh Tarwala, MBBS (2012-13)
Hyunwoo Do, MD (2011-12)

Research Fellows

Duane Oswald, PhD (2013-15)
Laura Ngwenya, MD PhD (2011-13)
Jes Paul, PhD (2011-12)
Choonghyo Kim, MD (2011-13)

Undergraduate/Graduate Students

Sarah Burns (2017-present)
Nadia Debick (2017-present)
Connor Gifford (2017-present)
Sina Aghili (2017-present)
Chelsea Chang (2016-present)
Meera Gopinath , BS (2016-17)
Rachel Corrigan, BS (2015-16)
Sarmistha Mazumder, MSc (2012-15)
Sayan Manna, (2014-15)
Meghan Vickery (2013-16)
Feni Kadakia (2014-15)
Jackie Miozzi (2012-13)
Andrew Callion (2010-12)

Clinical Trials – Current

Spinal Cord Injury Trials:

Spinal Cord Injury Neuroprotection with Glyburide (SCING). Pilot Study: An Open-Label Prospective Evaluation of the Feasibility, Safety, Pharmacokinetics, and Preliminary Efficacy of Oral Glyburide (DiaBeta) in Patients with Acute Traumatic Spinal Cord Injury. Multi-Center Study. **Farhadi HF, Principal Sponsor-Investigator.** [NCT02524379](https://clinicaltrials.gov/ct2/show/NCT02524379).

A Phase 2b/3, Double-blind, Randomized, Placebo-Controlled, Multicenter Study to Assess the Efficacy and Safety of VX-210 in Subjects With Acute Traumatic Cervical Spinal Cord Injury, **Farhadi HF, Site Principal Investigator.** [NCT02669849](https://clinicaltrials.gov/ct2/show/NCT02669849).

Adult Spinal Deformity Trials:

Prospective Multi-Center Follow-up of Patients Undergoing Instrumented Thoracic and Lumbar Arthrodesis Supplemented by the Implant Jazz System™. **Farhadi HF, Principal Sponsor-Investigator.** [NCT02411799](https://clinicaltrials.gov/ct2/show/NCT02411799).

Lumbar Fusion Trials:

Lumbar Fusion with 3D-Printed Porous Titanium Interbody Cages – A Single-Blinded Randomized Controlled Trial Evaluating NexxtMatrixx™ Versus PEEK Cages, **Farhadi HF, Principal Sponsor-Investigator.**

A Prospective, Single Arm Study of Patients Undergoing Posterolateral Lumbar Fusion (without Interbody) Supplemented with ViviGen Cellular Bone Matrix, **Farhadi HF, Principal Sponsor-Investigator.**

Prospective Follow-up of Elderly Patients Undergoing Instrumented Lumbar Arthrodesis Supplemented by the Implant Jazz System™. **Farhadi HF, Principal Sponsor-Investigator.** [NCT0343422](https://clinicaltrials.gov/ct2/show/NCT0343422).

Cervical Fusion Trials:

A Multi-center, Prospective, Single Arm Study of Patients Undergoing a Two or Three Level ACDF Using ViviGen® Cellular Bone Matrix in Conjunction with Cervical Allograft Spacers and DePuy Synthes Spine Anterior Cervical Plate Systems. Multi-Center Study, **Farhadi HF, Site Principal Investigator.** [NCT02814825](https://clinicaltrials.gov/ct2/show/NCT02814825).

Clinical Trials – Completed

Lumbar Fusion Trials:

Biomet® Cellentra™ Viable Cell Bone Matrix (VCBM) Posterolateral Lumbar Fusion Outcomes Study (VCBM/PLF), **Farhadi HF, Site Principal Investigator.**

Cervical Fusion Trials:

Cellentra™ Viable Cell Bone Matrix (VCBM) Anterior Cervical Discectomy and Fusion Outcomes Study (VCBM/MaxAn®), **Farhadi HF, Site Principal Investigator.** [NCT02182843](https://clinicaltrials.gov/ct2/show/NCT02182843).

Cervical Myelopathy Trials:

Efficacy of Riluzole in Patients with Cervical Spondylotic Myelopathy Undergoing Surgical Treatment. A Randomized, Double-Blind, Placebo-Controlled, Multi-Center Study, **Farhadi HF, Site Principal Investigator.** [NCT01257828](https://clinicaltrials.gov/ct2/show/NCT01257828).

Recent Scientific Contributions

1. Prevention of Proximal Junctional Kyphosis (PJK)

Prospective assessment of safety and early outcomes following sublaminar band placement for prevention of proximal junctional kyphosis. J Neurosurg Spine. 28(5): 520-531.

This study represents the first trial of proximal junctional sublaminar band placement in adults undergoing long-segment spinal deformity surgery. Sublaminar bands at the UIV+1 level were shown to be relatively safe and were not associated with an increased rate of PJK. Moreover, no subjects developed proximal junctional failure (PJF). The incidence of proximal junctional kyphosis was 7.5% at a median 1 year follow-up. We are currently undertaking a larger-scale analysis with ongoing follow-up to further define the potential benefit of sublaminar bands in reducing the incidence of PJK and PJF. Most up-to-date prospective data will be presented at the upcoming IMAST meeting (July 13, 2018).

2. Spinal Cord Injury Imaging Biomarkers

Impact of Admission Imaging Findings on Neurological Outcomes in Acute Cervical Traumatic Spinal Cord Injury. Journal of Neurotrauma. 23 March 2018 (epub).

This study represents the first comparative evaluation of admission MRI parameters in terms of their ability to predict neurological outcomes during the chronic post-spinal cord injury recovery phase (at 1 year). Axial (BASIC) and sagittal (IML) intrinsic cord signal markers were shown to more faithfully predict neurological recovery than other measures (MCC and MSCC). The recently described BASIC score demonstrated the highest overall predictive value for AIS conversion at one year (AUC 0.94). The calculated absolute “probability of improvement” resulting from this work will help in the design of future clinical trials and in counseling of patients with acute cervical traumatic spinal cord injuries.

3. Stem cell therapy for CNS trauma

Implantation of neuronal stem cells enhances object recognition without increasing neurogenesis after lateral fluid percussion injury in mice. Stem Cells International. Volume 2018. 6 February, 2018 (epub).

The study confirms that injury-induced cognitive deficits following TBI in mice are reversed one week after neural progenitor cell (NPC) transplantation. While TBI alone promotes hippocampal neurogenesis, subsequent NPC transplantation actually prevents increased neurogenesis and is not associated with morphological maturation of endogenous injury-induced immature neurons. Thus, NPC transplantation enhances cognitive recovery after CNS injury without a concomitant increase in neuron numbers or maturation. These data provide insight into the mechanism of action of stem cells after CNS injury. We are currently extending this work to identify the precise NPC-secreted factors that mediate this cognitive improvement.

Publications: Papers

Viswanathan VK, Ganguly R, Minnema AJ, Devries Watson N, Grosland N, Fredericks D, Grossbach A, Viljoen S, **Farhadi HF**. Biomechanical Assessment of Proximal Junctional Semi-Rigid Fixation in Long-Segment Thoracolumbar Constructs. *Journal of Neurosurgery: Spine*. In press.

Viswanathan VK, Hatef J, Aghili S, Minnema AJ, **Farhadi HF**. Comparative Utility of Dynamic and Static Imaging in the Management of Lumbar Spondylolisthesis. *World Neurosurgery*. 2018 Jun 18. pii: S1878-8750(18)31281-6. doi: 10.1016/j.wneu.2018.06.066.

Ryu JC, Tooke K, Malley SE, Soulas A, Weiss T, Ganesh N, Saidi N, Daugherty S, Saragovi U, Ikeda Y, Zabbarova I, Kanai AJ, Yoshiyama M, **Farhadi HF**, de Groat WC, Vizzard MA, and Yoon SO. 1 May 2018. Role of ProNGF-p75 signaling in loss of bladder function after spinal cord injury. *The Journal of Clinical Investigation*. 128(5). Doi: 10.1172/JCI97837.

Viswanathan V, Minnema AJ, **Farhadi HF**. 27 Mar 2018. Surgical Management of Adult Type 1 Split Cord Malformation. Report of Two Cases with Literature Review. *Journal of Clinical Neuroscience*. Doi: 10.1016/j.jocn.2018.03.029.

Farhadi HF, Kukreja S, Minnema AJ, Vatti L, Gopinath M, Prevedello L, Chen C, Xiang H, Schwab JM. 23 Mar 2018. Impact of Admission Imaging Findings on Neurological Outcomes in Acute Cervical Traumatic Spinal Cord Injury. *Journal of Neurotrauma*. doi: 10.1089/neu.2017.5510.

Viswanathan V, Kukreja S, Minnema A, **Farhadi HF**. 9 Feb 2018. Prospective assessment of safety and early outcomes following sublaminar band placement for prevention of proximal junctional kyphosis. *J Neurosurg Spine*. 28(5): 520-531. doi: 10.3171/2017.8.SPINE17672

Ngwenya LB, Mazumder S, Porter ZR, Minnema AJ, Oswald DJ, **Farhadi HF**. 6 Feb 2018. Implantation of neuronal stem cells enhances object recognition without increasing neurogenesis after lateral fluid percussion injury in mice. *Stem Cells International*. Volume 2018: 4209821. doi: 10.1155/2018/4209821.

Viswanathan V, Manoharan SR, Do H, Minnema A, Shaddy SM, Elder JB, **Farhadi HF**. 31 May 2017. Clinical and radiologic outcomes following fenestration and partial wall excision of idiopathic intradural spinal arachnoid cysts presenting with myelopathy. *World Neurosurg* 105:213-222. Doi: 10.1016/j.wneu.2017.05.136.

Manoharan SR, Shaw AB, Arnold CA, **Farhadi HF**. 1 Jan 2015. Infiltrative intramuscular myxoma of the cervical spine: a case report. *Spine J* 15(1):e1-4. Doi: 10.1016/j.spinee.2014.09.008

Moore AM, Kasukurthi R, Magill CK, **Farhadi HF**, Borschel GH, Mackinnon SE. June 2009. Limitations of conduits in peripheral nerve repairs. *Hand* 4(2):180. Doi: 10.1007/s11552-008-9158-3.

Farhadi HF, Peterson AC. 2006. The *myelin basic protein* gene: a prototype for combinatorial mammalian transcriptional regulation. *Adv Neurol* 98:65.

Denarier E, Forghani R, **Farhadi HF**, Dib S, Dionne N, Friedman H, Lepage P, Hudson T, Drouin R, Peterson AC. 2005. Functional organization of a Schwann cell enhancer. *J Neurosci* 25(48):11210.

Farhadi HF, Lepage P, Forghani R, Friedman HCH, Orfali W, Jasmin L, Miller W, Hudson TJ, Peterson AC. 2003. A combinatorial network of evolutionarily conserved myelin basic protein regulatory sequences confers distinct glial-specific phenotypes. *J Neurosci* 23(32):10214.

Forghani R, Garofalo L, Foran DR, **Farhadi HF**, Lepage P, Hudson TJ, Tretjakoff I, Valera P, Peterson A. 2001. A distal upstream enhancer from the myelin basic protein gene regulates expression in myelin-forming Schwann cells. *J Neurosci* 21(11):3780.

Mowla SJ, **Farhadi HF**, Pareek S, Atwal JK, Morris SJ, Seidah NG, Murphy RA. 2001. Biosynthesis and Post-translational Processing of the Precursor to Brain-Derived Neurotrophic Factor. *J Biol Chem* 276(16):12660.

Farhadi HF, Mowla SJ, Petrecca K, Morris SJ, Seidah NG, Murphy RA. 2000. Neurotrophin-3 sorts to the constitutive secretory pathway of hippocampal neurons and is diverted to the regulated secretory pathway by coexpression with brain-derived neurotrophic factor. *J Neurosci* 20(11):4059.

Farhadi HF, Forghani R, Peterson AC. 1999. MBP-LacZ transgene expression in juvenile and adult *trembler-J* mice. *Ann NY Acad Sci* 883:538.

Mowla SJ, Pareek S, **Farhadi HF**, Petrecca K, Fawcett JP, Seidah NG, Morris SJ, Sossin WS, Murphy RA. 1999. Differential sorting of nerve growth factor and brain-derived neurotrophic factor in hippocampal neurons. *J Neurosci* 19(6):2069.

Farhadi H, Pareek S, Day R, Dong W, Chretien M, Bergeron JJM, Seidah NG, Murphy RA. 1997. Prohormone convertases in mouse submandibular gland: Co-localization of furin and nerve growth factor. *J Histochem Cytochem* 45(6):795.

Book Chapters

Shaw A, Ikeda D, **Farhadi HF**. “2001 Volvo award winner in clinical studies: Lumbar fusion versus nonsurgical treatment for chronic low back pain. A multicenter randomized controlled trial from the Swedish Lumbar Spine Study Group.” In: *50 Studies Every Spine Surgeon Should Know*. Editors: Vaccaro, Wilson, & Fisher.

Ikeda D, **Farhadi HF**. “Central Cord Syndrome / Cord Contusion.” In: *Neurosurgery Case Review, Second edition*. Editors Sabbah, Nader, Elbabaa, & Gragnaniello.

Ikeda D, **Farhadi HF**. “Hangman’s Fracture.” In: *Neurosurgery Case Review, Second edition*. Editors Sabbah, Nader, Elbabaa, & Gragnaniello.

Kukreja S, **Farhadi HF**. “Thoracolumbar Scoliosis.” In: *Neurosurgery Case Review, Second edition*. Editors Sabbah, Nader, Elbabaa, & Gragnaniello.

Marlin E, **Farhadi HF**. “Thoracolumbar dislocation with complete paraplegia.” In: *Neurosurgery Case Review, Second edition*. Editors Sabbah, Nader, Elbabaa, & Gragnaniello.

Smith L, **Farhadi HF**. “Gunshot Wound to the Spine / Penetrating Spinal Cord Injury.” In: *Neurosurgery Case Review, Second edition*. Editors Sabbah, Nader, Elbabaa, & Gragnaniello.

Farhadi HF, Lonser RR. “Nerve Transfer Procedures for Upper Trunk Avulsion.” In: *Neurosurgical Operative Atlas: Spine and Peripheral Nerves, 3rd edition*. Editors: Wolfla & Resnick.

Ngwenya L, **Farhadi HF**. “Radial Nerve Decompression.” In: *Neurosurgery Tricks of the Trade*. Editors: Berta, Levy, & Nader.

Porensky P, **Farhadi HF**. “Thoracic Outlet Syndrome.” In: *Neurosurgery Tricks of the Trade*. Editors: Nader R, Berta S, Gragnaniello C, Sabbagh S, Levy M.

Do H, **Farhadi HF**. “Surgical Management of Ankylosing Spondylitis.” In: *Neurosurgery Tricks of the Trade*. Editors: Nader R, Berta S, Gragnaniello C, Sabbagh S, Levy M.

Farhadi HF, Levi AD. “Peripheral Nerve Grafts and the Repair of Axonal Circuits Following Spinal Cord Injury”. In: *Essentials of Spinal Cord Injury (2012)*. Editors: Fehlings MG, Boakye M, Ditunno JF, Vaccaro AR, Rossignol S, Burns AS

Farhadi HF, Vincent F, Fehlings MG. “Cervical Spine Injuries in Athletes”. In: *Atlas of Spine Trauma: Adult and Pediatric (2008)*. Editors: Kim DH, Ludwig SC, Vaccaro AR.

Farhadi HF, Rutka JT. “Molecular Markers and Pathways in Brain Tumorigenesis”. In: *Neuro-Oncology: The Essentials, 2nd Edition (2008)*. Editors: Bernstein M & Berger MS.

Editorials

Viswanathan VK, Minnema AJ, **Farhadi HF**. Re: The effect of prophylactic vertebroplasty on the incidence of proximal junctional kyphosis and proximal junctional failure following posterior spinal fusion in adult spinal deformity: a 5-year follow-up study. April 16, 2018, *The Spine Journal*.

Viswanathan VK, **Farhadi HF**. Extended follow-up of thoracolumbar burst fractures randomized to treatment with orthosis versus no orthosis. September 27, 2017, *Neurosurgery Watch*.

Farhadi HF, Viswanathan VK. Randomized trial of anterior cervical discectomy and fusion for radiculopathy. September 30, 2016, *Neurosurgery Watch*.

Farhadi HF. Prospective evaluation of complication rates associated with adult spinal deformity surgery. August 1, 2016, *Neurosurgery Watch*.

Farhadi HF. Steroid use after anterior cervical surgery reduces early postoperative dysphagia. August 31, 2015, *Neurosurgery Watch*.

Kunte H, **Farhadi HF**, Sheth K, Simard, JM, Kronenberg G. Sulfonylureas – a novel treatment to reduce tissue damage after acute spinal cord injury? April 2015, *Lancet Neurology* 14:352.

Farhadi, HF. 4-year results of contiguous cervical arthroplasty versus anterior discectomy and fusion. November 24, 2014, *Neurosurgery Watch*.

Manoharan, SR, and **Farhadi, HF.** Updated Guidelines for Fusion in Managing Degenerative Lumbar Spine Disease. July 31, 2014, *Neurosurgery Watch*.

Manoharan, SR, and **Farhadi, HF.** Circumferential thoracolumbar fracture stabilization is safe, with high fusion and stabilization rates. April 30, 2014, *Neurosurgery Watch*.

Manoharan, SR, and **Farhadi, HF.** Seventy Percent Reduction in Transcranial Motor Evoked Potential Is Most Valid Measure of Neurological Worsening During Complex Spine Surgery. January 2, 2014, *Neurosurgery Watch*.

Manoharan, SR, and **Farhadi, HF.** Comparison of Contiguous 2-Level Cervical Arthroplasty Versus Anterior Discectomy and Fusion. December 1, 2013, *Neurosurgery Watch*.

Farhadi HF, Lonser RR. 2013. Diffusion tensor imaging in the spotlight on concussion. *World Neurosurg* 80(6):794-5.

Fehlings MG, **Farhadi HF**. 2007. Cervical stenosis, spinal cord neurapraxia, and the professional athlete. *J Neurosurg Spine* 6(4):354.

Abstracts, Presentations, Talks

Minnema AJ, Mast J, Peng J, Schwab JM, **Farhadi HF**. "Maximal Cord Swelling Predicts Neurological Recover in Patients with Intradural Compression after Cervical Spinal Cord Injury". The 3rd Joint Symposium of the International and National Neurotrauma Societies and AANS/CNS Section on Neurotrauma and Critical Care. Toronto, Canada. Aug. 11-16, 2018.

Viswanathan VK, Minnema AJ, Vatti LS, McGwin Gerald, **Farhadi HF**. "Sagittal Alignment Following Single-Level Lumbar Interbody Fusion: Comparison of Anterior, Lateral and Posterior Approaches: A Systematic Review and Meta-Anlysis". NASS Annual Meeting. Los Angeles, CA. Sept. 26-29, 2018.

Fehlings MG, Kopjar B, Ahn H, **Farhadi HF**, Shaffrey CI, Nassr AN, Arnold PM, Jacobs B, Riew KD, Brodke DS, Hilibrand AS, Harrop JS, Yoon ST, Kim KD, Fourney V DR, Santaguida C. "Safety and efficacy of riluzole in degenerative spondylotic myelopathy. Results of the Phase III RCT". NASS Annual Meeting. Los Angeles, CA. Sept. 26-29, 2018.

Viswanathan VK, Minnema AJ, **Farhadi HF**. Oral Podium Presentation: "Prospective assessment mid-term radiological outcomes following sublaminar band placement for prevention of proximal junctional kyphosis". 25th International Meeting on Advanced Spine Techniques (IMAST). Los Angeles, CA. July 13, 2018.

Farhadi HF. "Management of Acute Cord Compression and Myelopathy". Neurology Resident Lecture Series. May 4, 2018.

Viswanathan V, Kukreja S, Minnema A, **Farhadi HF**. Oral Podium Presentation: "Prospective Assessment of Early Clinical and Radiologic Outcomes Following Sublaminar Band Placement for Proximal Junctional Kyphosis Prophylaxis in Adult Spinal Deformity Surgery". NASS Annual Meeting. Orlando, FL. October 26, 2017.

Viswanathan VK, Ganguly R, Minnema A, Watson N, Grosland NM, Fredericks D, Viljoen S, **Farhadi HF**. "Biomechanical Evaluation of Proximal Junctional Segments Following Long-Segment Pedicle Screw-Only Versus Hybrid Fixation". CNS Annual Meeting. Boston, MA. October 7-11, 2017.

Hatef J, Aghili S, Viswanathan VK, Minnema A, **Farhadi HF**. "Comparative Utility of Dynamic and Static Imaging in the Management of Lumbar Spondylolisthesis". CNS Annual Meeting. Boston, MA. October 7-11, 2017.

Shaikhouni A, Baum J, Gifford C, Minnema A, Viljoen S, Nimjee SM, **Farhadi HF**. "Epidemiology of Substance Abuse-Related Spinal Epidural Abscesses at the Ohio State University Medical Center". CNS Annual Meeting. Boston, MA. October 7-11, 2017.

Farhadi HF. "Proximal Junctional Kyphosis - Can it be avoided? Latest Evidence on Associated Factors and Potential Treatments". 2017 Midwest Spine Symposium. September 22, 2017.

Farhadi HF. "Acute Spinal Cord Injury Overview: Recognition, Assessment and Treatment". Buckeye Fire and EMS Conference. Columbus, OH. September 8, 2017.

Farhadi, HF. "Critical Care Management of Systemic Blood and Intracranial Pressures Following Traumatic Brain Injury". Genesis Healthcare System Trauma Rounds. Zanesville, OH. September 7, 2017.

Farhadi, HF. "Impact of Initial Clinical and Imaging Parameters on Long-Term Neurological Outcomes in Acute Traumatic Cervical Spinal Cord Injury". 2017 OSU Spinal Cord Injury Summit. Columbus, OH. May 20, 2017.

Farhadi HF. "Spinal Cord Injury – Current Therapies." 37th Annual Orthopaedic Symposium; Emerging Technique to Spine Reconstruction; Evidence Based Care. Loma Linda University, Loma Linda, CA. March 5, 2017.

Farhadi, HF. "Revision Spine Surgery: Case Presentation". 2016 Spinal Deformity Peer to Peer Meeting. San Diego, CA. October 15, 2016.

Farhadi, HF. "Promoting Quality in Spine Care". 2016 Spinal Deformity Peer to Peer Meeting. San Diego, CA. October 15, 2016.

Farhadi, HF. "Spinal Infection – Delayed Sequelae". 2016 Spinal Deformity Peer to Peer Meeting. San Diego, CA. October 14, 2016.

Farhadi, HF. "Prehospital Spinal Immobilization and Transportation of Trauma Patients". Presented at CNS Annual Meeting. San Diego, CA. September 28, 2016.

Farhadi, HF. "Peripheral Nerve Board Review - Brachial Plexus". Presented at CNS Annual Meeting. San Diego, CA. September 27, 2016.

Farhadi, HF. Oral Podium Presentation: "Impact of Initial Clinical and Radiologic Factors on Long-Term Neurological Outcomes in Acute Traumatic Cervical Spinal Cord Injury". Presented at CNS Annual Meeting. San Diego, CA. September 27, 2016.

Farhadi, HF. "Intraoperative Monitoring: Medical Necessity or Medicolegal Nightmare?" Presented at CNS Annual Meeting. San Diego, CA. September 24, 2016.

Farhadi, HF. Acute Spinal Cord Injury Overview: Recognition, Assessment and Treatment. Air Evac Emergency Medical Services Rounds. Air Evac Lifeteam 107, St Louisville, OH. July 14, 2016.

Farhadi, HF. "Management of Acute Spinal Cord Injury." Adena Health System Emergency Medicine Residency Program Rounds. Chillicothe, OH. June 14, 2016.

Farhadi, HF. "Prospective Multi-Center Follow-up of Patients Undergoing Instrumented Thoracic and Lumbar Arthrodesis Supplemented by the Implanet Jazz System™ (PJK Module)". French Spine Society Congress 2016. Lyon, France. June 8, 2016.

Farhadi, HF. "Minimally Invasive Lumbar Spine Surgery". OSU MIS Spine Cadaver Course. Columbus, OH. May 20, 2016.

Farhadi, HF. "Impact of Initial Clinical and Radiologic Parameters on Neurological Outcomes Following Acute Spinal Cord Injury". Sixth Annual COTS Trauma Research Symposium. Columbus, OH. May 10, 2016.

Farhadi, HF. "Acute Spinal Cord Injury Overview: Recognition, Assessment and Treatment". Worthington Fire and Emergency Medical Services Rounds. Columbus, OH. February 15, 2016.

Farhadi, HF. "Revision Surgery: Case Presentation". 2015 Spinal Deformity Peer to Peer Meeting. San Diego, CA. November 14, 2015.

Farhadi, HF. "Challenges of Soft Bone: Case Presentation". 2015 Spinal Deformity Peer to Peer Meeting. San Diego, CA. November 13, 2015.

Farhadi, HF. "Acute Spinal Cord Injury Overview: Recognition, Assessment, and Treatment". Wyandot Memorial Hospital Emergency Department Rounds. Upper Sandusky, OH. October 6, 2015.

Farhadi, HF. "Acute Spinal Cord Injury and GOSCI". COTS Emergency Medicine Research Meeting. Columbus, OH. July 6, 2015.

Oswald D, Kim CK, Mazumder S, Ngwenya L, **Farhadi HF.** Golli-Myelin Basic Protein is Required for Maturation of Oligodendrocyte Progenitor Cells and Remyelination following Spinal Cord Contusion. Neurotrauma 2015 Symposium, Santa Fe, NM. June 28-July 1.

Farhadi, HF. "Deficient Golli-MBP Levels Result in Delayed Oligodendrocyte Progenitor Cell Recruitment and Impaired Recovery Following Spinal Cord Injury". University of Kentucky Neurosurgery Grand Rounds. Lexington, KY. June 4, 2015.

Farhadi, HF. "Deficient Golli-MBP Levels Result in Delayed Oligodendrocyte Progenitor Cell Recruitment and Impaired Recovery Following Spinal Cord Injury". Fifth Annual COTS Trauma Research Symposium. Columbus, OH. May 12, 2015.

Farhadi, HF. "GOSCIP Pilot Trial". Columbus Division of Fire Quarterly Protocol Committee Meeting. Columbus, OH. April 27, 2015.

Farhadi, HF. "GOSCIP Pilot Trial". Columbus Division of Fire Research Committee Meeting. Columbus, OH. April 22, 2015.

Farhadi, HF. Part 1: "Acute Spinal Cord Injury (ASCI) Overview: Recognition, Assessment and Treatment. Part 2: "ASCI Pilot Drug Trial in collaboration with Grant Medical Center". Two-Hour Trauma In-Service for EMS and Nurses. OSU Neurological Institute. Columbus, OH. March 30, 2015.

Farhadi, HF. "Acute Cervical Spinal Cord Injury – Treatment and Timing." 2015 DePuy Synthes Future Leaders Workshop: Surgical Management of Cervical Spine Trauma. New Albany, OH. March 13-14, 2015.

Farhadi, HF. Complex/Scoliosis Case Presentation. Columbus Citywide Spine Rounds. Columbus, OH. August 20, 2014.

Farhadi, HF. "The Important Role of Nurse Navigators in Improving Patient Triage and Satisfaction." Presented at AANS Meeting, San Francisco, CA. April 2014.

Farhadi, HF. "Management of Brachial Plexus Injuries." Neurology Resident Teaching Seminars. The Ohio State University, Columbus, OH. April 2014.

Farhadi, HF. "Revision Minimally Invasive Spine Surgery." Presented at AANS/CNS Spine Section Meeting. Orlando, FL. March 2014.

Farhadi, HF. "Proximal Junctional Kyphosis following Thoracolumbar Deformity Correction." Presented at AANS/CNS Spine Section Meeting. Orlando, FL. March 2014.

Farhadi, HF. "Management of Acute Cord Compression and Cervical Spondylotic Myelopathy." Presented at Neurology Resident Teaching Seminars. OSUWMC, Columbus, OH. March 2014.

Farhadi, HF. "Neuroscience of Concussion: Focus on Imaging." Presented at OSU Sports Medicine Symposium: Concussions in Athletes. Alumni House, Columbus, OH. March 2014.

Farhadi, HF. "Blood Loss in Spine Surgery." Presented at Advanced Biosurgery Workshop, Peers within Field. OSUWMC/Grant Medical Center, Columbus, OH. February 2014.

Farhadi, HF. "MIS TLIF and Lateral approaches to the Lumbar Spine." Presented at 2013 DePuy

Synthes Spine Future Leaders Workshop:Surgical Concepts in Minimally Invasive Spine Surgery. Hyatt Regency, Cleveland. December 2013.

Laura Ngwenya, **H. Francis Farhadi, M.D. Ph.D., Presenter.** "The influence of neural progenitor cell treatment on aberrant adult neurogenesis following fluid percussion injury in mice." Presented at SFN, San Diego, CA. November 2013.

Kim CK, **Farhadi HF.** Modeling of graded contusional spinal cord injury in the mouse using the Infinite Horizon impactor. Neurotrauma 2013 Symposium, Nashville, TN, August 4-7.

Farhadi, HF. "Concussions in Football." Presented at Football Concussions, Other. Woody Hayes, Columbus, OH, United States. August 2013.

Farhadi, HF. "Oh, My Aching Back!." Presented at Symposium for Primary Care Providers, Columbus, United States. August 2013.

Farhadi, HF. "The Important Role of Nurse Navigators in Improving Patient Triage and Satisfaction." Presented at AANS Meeting, New Orleans, Louisiana, United States. April 2013.

Farhadi, HF. Are we operating too much on elderly patients? Presented at Medical Review Club, Columbus, OH. March 2013.

Farhadi, HF. Minimally invasive applications in revision spine surgery. 2013 AANS/CNS Spine Section Meeting, Phoenix. March 2013.

Farhadi, HF. Management of Acute Cord Compression. MedCentral - Mansfield Hospital Medical Grand Rounds. November 20, 2012.

Farhadi HF. Evaluation and Management of Brachial Plexus Injuries. OSU Division of Physical Therapy Seminar, October 4, 2012.

Farhadi HF. Oligodendrocyte Progenitor Cells and Recovery Following Spinal Cord Injury. OSU Neuroscience Graduate Studies Program Seminar, October 3, 2012.

Ngwenya L, **Farhadi HF.** A locomotor task to stratify severity of experimental traumatic brain injury. Neurotrauma 2012 Symposium, Phoenix, AZ, July 22-25.

Ngwenya L, **Farhadi HF.** Determination of critical gap length in a mouse model of sciatic nerve injury. Neurotrauma 2012 Symposium, Phoenix, AZ, July 22-25.

Farhadi, HF. Evaluation & Management of Nerve Injuries. OSU Trauma Rounds. March 28, 2012.

Farhadi, HF. Current Controversies in the Diagnosis and Management of Lower Extremity Entrapment Neuropathies. The Winter Clinics for Cranial and Spinal Surgery. Snowmass, Colorado, February 2012.

Farhadi, HF. Anatomy of the Lumbar Spine. 2011 Columbus Ohio Nursing Program Conference. September 17, 2011.

Farhadi, HF. Spinal Deformity. 2011 Columbus Ohio Nursing Program Conference. September 17, 2011.

Farhadi, HF. Treatment of Degenerative Spinal Disease in Elderly Patients. Columbus Medical Review Club. September 14, 2011.

Farhadi, HF. The Management of Degenerative Lumbar Spine Disease: What is the evidence for surgical intervention? MedCentral - Mansfield Hospital Medical Grand Rounds. June 15, 2010.

Farhadi, HF. "Key aspects of the first year in practice . " *Stryker Life after Fellowship Dinner*. Oct 26, 2010.

Farhadi HF. Emerging Cell-Based Therapies for the Treatment of Traumatic Spinal Cord Injuries. The Ohio State University Department of Surgery Grand Rounds. May 6, 2010.

Farhadi HF, Brown J, Mackinnon SE. Preoperative weakness is more predictive than MRI interpretation of malignant pathology in peripheral nerve tumors: Retrospective analysis of 89 cases. American Society for Peripheral Nerve 2009 Annual Meeting, January 9-11, Maui, Hawaii.

Farhadi HF. 2006. Transcriptional regulation of myelin basic protein in development and regeneration. Keith Visiting Lectureship, February 13-14, University of Toronto.

Farhadi HF, Forghani R, Orfali W, Peterson A. 2000. Dissection of the MBP promoter using a single copy and chosen site of insertion transgenesis strategy. *Gordon Conference on Myelin Biology & Demyelinating Disease*, Il Ciocco, Italy.

Farhadi HF, Forghani R, Valera P, Peterson AC. 1999. Differential regulation of MBP-promoted transgenes in myelinating and remyelinating Schwann cells. *Soc Neurosci Abs* 29:190.12.

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Farhadi HF. Constitutively secreted NT-3 can be directed to the regulated secretory pathway by dimerization with BDNF. Presented at the 40th Annual Fellows' Day at the Montreal Neurological Hospital, May, 1998.

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Farhadi H, Pareek S, Marcinkiewicz M, Seidah NG, Chretien M, and Murphy RA. 1994. Detection of prohormone convertases in developing and adult mouse submandibular glands. *Soc Neurosci Abs* 24:538.10.