Curriculum Vitae

Kushagra Verma MD, MS

2004 – 2005 (M.S.) NYU, Graduate School Arts and Science (New York, NY) Molecular Biology 1999 – 2004 (B.S.) Cornell University, School of Engineering (Ithaca, NY) Biomedical Engineering Post Graduate Training 2015 – 2016 University of California, San Francisco (San Francisco, CA) Adult and Pediatric Spine Fellowship, Spinal Deformity 2010 – 2015 Thomas Jefferson University, Rothman Institute (Philadelphia, PA) Orthopaedic Surgery Residency Academic Appointments		
Post Graduate Training 2015 – 2016 University of California, San Francisco (San Francisco, CA) Adult and Pediatric Spine Fellowship, Spinal Deformity 2010 – 2015 Thomas Jefferson University, Rothman Institute (Philadelphia, PA) Orthopaedic Surgery Residency Academic Appointments		
2015 – 2016 University of California, San Francisco (San Francisco, CA) Adult and Pediatric Spine Fellowship, Spinal Deformity 2010 – 2015 Thomas Jefferson University, Rothman Institute (Philadelphia, PA) Orthopaedic Surgery Residency Academic Appointments		
2015 – 2016 University of California, San Francisco (San Francisco, CA) Adult and Pediatric Spine Fellowship, Spinal Deformity 2010 – 2015 Thomas Jefferson University, Rothman Institute (Philadelphia, PA) Orthopaedic Surgery Residency Academic Appointments		
Orthopaedic Surgery Residency Academic Appointments		
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2016 – 2018 <u>University of Washington (Seattle, WA)</u> Assistant Professor of Orthopaedics and Sports Medicine Adult and Pediatric Spine and Spine Deformity		
2019 – <u>Long Beach Memorial (Long Beach, CA)</u> Faculty, Sports Medicine Fellowship Faculty, Family Medicine Residency		
2019 – Western University of Health Sciences (Pomona, CA) Clinical Assistant Professor Surgery		
Honors		
2019 Recipient of Top Doctor Award (Los Alamitos, CA)		
2018 Recipient of Edgar Dawson Traveling Fellowship (Scoliosis Research Society)		
Finalist for Faculty Teaching Award		
(University of Washington)		

Recipient of K2M Fellowship Award, Accra Ghana

(Foundation For Orthopaedics and Complex Spine)

2016

2016	Recipient of Young Investigator Award
	(Society of Lateral Access Surgeons)
2014	Recipient of AAOS/OREF/ORS Clinician Scholar Development Program
	(Scoliosis Research Society)
2014	Recipient of EOA Resident Travel Grant
	(Eastern Orthopaedic Society)
2013	Finalist for Russell Hibbs Award in Clinical Science: Best Clinical Paper,
	(Scoliosis Research Society)
2013	Finalist for Best Clinical Paper
	(North American Spine Society)
2011	Finalist for Thomas Whitecloud Award; Best Clinical Paper
	(International Meeting for Advanced Spine Techniques)
2011	Finalist for Best Clinical Paper
	(North American Spine Society)
2010	Recipient of Russell Hibbs Award; Best Clinical Paper
	(Scoliosis Research Society)

Board Certification

USMLE: Step 1 – June 18th, 2007

Step 2 – May 7th, 2009 (CK), March 30th, 2010 (CS)

Step 3 – March 2nd, 2011

ABOS: Part 1 – July 9th, 2015

Part 2 – July 24th, 2018

Current License(s) to Practice

California 3/18/2015 to 3/31/2021 Washington 8/19/16 to 3/31/2019

Hospital Privileges

Long Beach Memorial Hospital Miller Children's Hospital Los Alamitos Medical Center

Professional Organizations

American Academy of Orthopedic Surgeons (AAOS) Scoliosis Research Society (SRS)

Journal Reviewer

Spine Deformity International Journal of Spine Surgery (IJSS) Clinical Spine Surgery

Committee Assignments

Scoliosis Research Society:

Website Committee (2019-2020) Adult Deformity Committee (2017-2018, 2018-2019) Global Outreach Committee (2018-2019)

Course Faculty/Invited Lectures

7/2019 (1) "Safety during Complex Deformity Surgery: Lessons from Global Outreach"

2/2019 (1) "Classification of Adult Deformity: Occiput to Pelvis"

(2) "Case Presentations: Adult Deformity"

(3) "Facet Arthropathy as a Pain Source Evaluation and Management" *Faculty Shelby Spine Conference* (Park City, UT)

10/2018 "Sharing Our Best Global Algorithms for the Treatment of Complex Spinal Deformity"

Faculty, 53rd Annual Scoliosis Research Society (Bologna, Italy)

9/2018 (1) "Pre-operative optimization for Adult Spinal Deformity"

(2) "High Grade Spondylolisthesis" Faculty 3rd Annual Global Spine Outreach Symposium (Monterrey, Mexico)

8/2017 "How to Approach Adult Deformity Early in Practice, Rebuilding a Spine Deformity Center"

Faculty, Eighth Annual ONE Spine Residents & Fellows Course (Seattle, WA)

7/2017 "Neuromuscular Scoliosis: Techniques For Correction, Complications, And Global Outreach"

Faculty, 2nd Annual Spinal Deformity Symposium (Seattle, WA)

7/2017 "Principles of Adult Deformity, Cervical and Lumbar"

Faculty, UW MIS Spine Cadaver Course (Seattle, WA)

5/2017 "Adolescent Scoliosis and Adult Spinal Deformity- Discussion on Care & Treatment"

Online UWMC CME Lecture (Seattle, WA)

6/2016 "Management of Blood Loss in Spinal Deformity Surgery" *UCSF Spine Symposium (San Francisco, CA)*

5/2015 "Demographic Factors Affect Quality of Life Outcomes in America, Asia, and Africa"

Jefferson Orthopaedic Society (Philadelphia, PA)

4/2015 "International Volunteerism" Grand Rounds, Rothman Institute (Philadelphia, PA) 5/2013 "Antifibrinolytics For The Management of Blood Loss For Adolescent and Adult Spinal Deformity Surgery"

Jefferson Orthopaedic Society (Philadelphia, PA)

Surgeon Volunteerism

4/2020	Scheduled: Global Spine Outreach (GSO, Columbia)
4/2019	Global Spine Outreach (GSO, Mexico)
9/2018	Global Spine Outreach (GSO, Mexico)
5/2018	Global Spine Outreach (GSO, Columbia)
3/2018	Global Spine Outreach (GSO, Mexico)
11/2017	Global Spine Outreach (GSO, Columbia)
6/2017	Global Spine Outreach (GSO, Columbia)
8/2016	Foundation of Orthopaedics and Complex Spine (FOCOS, Ghana)
4/2013	Foundation of Orthopaedics and Complex Spine (FOCOS, Ghana)
11/2009	Foundation of Orthopaedics and Complex Spine (FOCOS, Ghana)
1/2009	Mariposa Foundation (Dominican Republic)

Peer Reviewed Publications (47)

In Press (1)

Baron Lonner, **Kushagra Verma**, Chanland Roonprapunt, Yuan Ren, Casey A Slattery, Ahmet Alanay, Gabrielle Kassin, Mohamad Bazerbashi, Mark A. Buehler, Manoj K Kodigudla, Amey V. Kelkar, Hassan Serhan, Vijay Goel "The Transverse Process Trajectory Technique: An Alternative for Thoracic Pedicle Screw Implantation- Radiographic and Biomechanical Analysis" (*Accepted IJSS*, 9/2019)

In Print (46)

Lori A. Dolan, Stuart L. Weinstein, Mark F. Abel....**Kushagra Verma** "Bracing in Adolescent Idiopathic Scoliosis Trial (BrAIST): Development and Validation of a Prognostic Model in Untreated Adolescent Idiopathic Scoliosis Using the Simplified Skeletal Maturity System" (Spine Deformity, 2019 Nov7(6): 890–898.e4)

Sigurd Berven, Matthew Baron, Vedat Deviren, Steven Glassman, Keith Bridwell, **Kushagra Verma** "The Assessment of Clinically Significant Differences in Treating Spinal Deformity Utilizing the SRS Questionnaire: What is the Threshold of Change that is Meaningful to Patients?" (Int J Spine Surg, 2019: April 30;13(2): 153-157)

Casey Slattery, **Kushagra Verma** "Outcome Measures in Adult Spine Surgery: How Do We Identify the Outcomes of Greatest Utility for Research? (*Clinical Spine Surgery*, 2019: May; 32(4):164-165)

Kushagra Verma, Casey Slattery, Oheneba Boachie. "Surgeon Volunteerism Taken A Step Further: My Experience with FOCOS From Medical School To An Attending" (*J Bone Joint Surg Am.* 2019; 101:854-5)

Casey Slattery, Jonathan Kark, Theodore Wagner, **Kushagra Verm**a. "The Use of Tranexamic Acid to Reduce Surgical Blood Loss: A Review Basic Science, Subspecialty Studies, and The Evolution of Use in Spine Deformity Surgery. (*Clinical Spine Surgery*; 2019 Feb 15

Deeptee Jain, **Kushagra Verma**, Jun Mizutani, Bobby Tay, Shane Burch, Vedat Deviren. "Comparison of Stand-Alone, Transposas Lateral Interbody Fusion at L3-4 and Cranial vs Transforaminal Interbody Fusion at L3-4 and L4-5 for the Treatment of Lumbar Adjacent Segment Disease" (*Int J Spine Surg.* 2018 Aug 31;12(4):469-474.)

Tyler Kreitz, Alexi Adan, Saty Verma, **Kushagra Verma** "Predictors of Research Productivity Among Orthopaedic Residents: A Prospective Study" (*J Am Acad Orthop Surg.* 2018 Sep 24 doi: 10.5435)

David Gendelburg, Casey Slattery, **Kushagra Verma** "Guidelines on How to Perform a Meta-Analysis: Strengths and Weaknesses of Design" (*Clin Spine Surg.* 2018 Sep 15. doi: 10.1097)

Courtney Toombs, **Kushagra Verma**, Baron S Lonner, David Feldman, Joseph Dryer, Thomas Errico, "Analysis of Factors Associated with Blood Loss in Neuromuscular Scoliosis Surgery" (*HJD Journal*, 2018;76(3):207-15)

Casey Slattery, Boris Kovalenko, **Kushagra Verma** "Congenital Shoulder Dislocation Identified at Birth After a Non-Traumatic Twin Caesarian Delivery: Case Report, Management Recommendations, And A Review of The Literature" (*Radiol Case Rep.* 2018 Jul 18;13(5):920-924)

Casey Slattery, **Kushagra Verma**, Fernando Rios, Gregory Mundis Jr, Oheneba Boachie-adjei, Anthony Rinella "Approaching Spine Research in an Outreach Setting – What Type of Infrastructure Is Conducive for Conducting Research?" (*Clin Spine Surg.* 2018 Aug 4)

Casey Slattery, Samantha Sokol, **Kushagra Verma** "Understanding Classification Systems in Spine Deformity" (*Clin Spine Surg, 2018*)

Casey A. Slattery, **Kushagra Verma** "Classification in Brief: Lenke Classification of Adolescent Idiopathic Scoliosis" (CORR, 2018)

Kushagra Verma, Casey A. Slattery, Henry Duah, Kawdwo Poku Yankey, Oheneba Boachie-Adjei "Comprehensive Assessment of Outcomes from Patients with Severe Early Onset Scoliosis Treated with A Vertebral Column Resection: Results from An SRS Global Outreach Site (FOCOS) in Ghana" (*JPO*, April 30, 2018 doi: 10.1097)

Casey A. Slattery, **Kushagra Verma** "Classification in Brief: Schwab Classification of Adult Spinal Deformity" (Clin Orthop Relat Res. 2018 Sep;476(9):1890-1894)

Khanna K, Padegimas EM, Zmistowski B, Howley M, **Verma K**. "The Drivers of Medicare Reimbursement for Thoracolumbar Fusion: An Analysis of Data from The Centers For Medicare and Medicaid Services" *Spine (Phila Pa 1976)*. 2017 Mar 23)

Mizutani J, **Verma K**, Endo K, Ishii K, Abumi K, Yagi M, Hosogane N, Yang J, Tay B, Deviren V, Ames C. "Global Spinal Alignment in Cervical Kyphotic Deformity: The Importance of Head Position and Thoracolumbar Alignment in the Compensatory Mechanism. (*Neurosurgery*. 2017 *Jun 7. doi: 10.1093*)

Michael Safaee, Joseph A Osorio, **Kushagra Verma**, Shay Bess, Christopher I. Shaffrey, Justin S. Smith, Robert Hart, Vedat Deviren, Christopher P. Ames "Proximal junctional kyphosis prevention strategies: a video technique guide" (*Oper Neurosurg*, 2017, Oct 1;13(5):581-585)

Anthony Boniello, **Kushagra Verma**, Thomas Errico, Austin Peters, Tessa Hunke, Kirsten Boenigk, Baron S. Lonner "Preoperative Autologous Blood Donation Does Not Effect Pre-incision Hematocrit in Adolescent Idiopathic Scoliosis. A Retrospective Cohort of a Prospective Randomized Trial." (*Int J Spine Surg.* 2016 Aug 16;10:27)

Kushagra Verma, Senthil Nathan, Carly Comer, Yuan Ren, Baron Lonner, Suken A. Shah "A Normative Baseline For The SRS-22 From Over 1000 Healthy Adolescents In India: Which Demographic Factors Affect Outcome?" (*Spine*, 2017, Jul 1;42(13):1011-2016)

Eric Padegimas, **Kushagra Verma**, Benjamin Zmistowski, Richard Rothman, James Purtill, Michael Howley "Medicare Reimbursement for Total Joint Arthroplasty—What are the Driving Forces?" (*JBJS Am*, 2016, Jun 15; 98(12): 1001 -1006)

Kushagra Verma_Anthony Boniello, Jeffrey Rihn "Fixation Options for Posterior Fusion in the Lumbar Spine" (*JAAOS*, 6/2016, Vol 24(6): p357 - 364)

Kushagra Verma, Eitan Kohan, Christopher Ames, Dana L. Cruz, Vedat Deviren, Sigurd Berven, Thomas Errico "A Comparison of Two Different Dosing Protocols for Tranexamic Acid in Posterior Spinal Fusion for Spinal Deformity: A Prospective, Randomized Trial" *IJSS, Nov 2015: Vol 9: 65; doi: 10.14444/2065*

Prakash Sitoula, **Kushagra Verma**, Laurens Holmes Jr, Peter G. Gabos, James O. Sanders, Petya Yorgova, Geraldine Neiss, Kenneth Rogers, Suken A. Shah "The Simplified Skeletal Maturity

Method and its Correlation with Curve Progression in Idiopathic Scoliosis" *Spine, Jul 2015: Vol 40(13): 1006-1013*

Kushagra Verma, Jake Fennessy, Ronald Huang, Pascal Jabbour, Jeffrey Rihn "Spinal dural arterovenous fistula presenting as a recurrent nucleus pulposus herniation: Case Report and Literature Review" *JBJS CC, Jul 8, 2015: 5(3):e59*

Sapan D. Gandhi, **Kushagra Verma**, Suken A. Shah, Baron S. Lonner. "Management of Blood Loss in Spinal Deformity Surgery" *Curr Ortho Practice May/June, Vol 16(3): 291-298*

Austin Peters, **Kushagra Verma**, Kseniya Slobodyanyuk, Thomas Cheriyan, Baron S. Lonner, Thomas Errico "Antifibrinolytics reduce blood loss in adult spinal deformity surgery: a prospective, randomized trial" *Spine, Apr 15, 2015: 40(8):E443-9*

Danielle Ponzio, David Pedowitz, **Kushagra Verma**, Mitchell Malenfort, Steven Raikin. "Does Postoperative Bunion Taping Prevent Recurrence?" *FAI*, *July 2015*, *36*(7):820-6

Per Trobisch, **Kushagra Verma** "Vertebral Body Replacement by Posterior Approach for Metastatic Disease in the Thoracic Spine - Modified Technique Using an Expandable Cage" *Oper Orthop Traumatol, June 27, 2015: 27(3):270-80*

Kushagra Verma, Prakash Sitoula, Peter Gabos, Kerry Loveland, James O. Sanders, Satyendra Verma, Suken A. Shah "Inter and Intra-Observer Reliability of The Simplified Skeletal Maturity Scoring System" *Spine 2014: Vol 39(26): pE1592 – E1598*

Kushagra Verma, Thomas Errico, Austin Peters, Tessa Hunke, Kirsten Boenigk, Baron S. Lonner "The Relative Efficacy of Antifibrinolytics in Adolescent Idiopathic Scoliosis: A Prospective Randomized Trial" *JBJS May 2014*, *96(10): 1-10*

Kushagra Verma, Baron Lonner, Courtney S. Toombs, Paige Ferrise, Bettye Wright, Akilah King, Oheneba Boachie-Adjei. "International Utilization of the SRS-22 Instrument to Assess Outcomes in Adolescent Idiopathic Scoliosis. What Can We Learn From A Medical Outreach Group in Ghana? *JPO*, *February 2014*

Kushagra Verma, Tracey Crothers, Brian Neuman, Alexander Vaccaro, Joshua Heller "A Case of Intradural Extramedullary Spinal Tuberculosis Diagnosed 8 Years After Treatment of the Primary Infection" *JBJS CC 2013, 3(4): 1-5*

Chris Diefenbach, Marc Ialenti, Baron Lonner, Jonathan Kamerlink, **Kushagra Verma**, Thomas Errico "Cost analysis of neuromuscular scoliosis correction surgery in 73 consecutive cases." *Bull Hosp Jt Dis* 2013, 71(4): 272-7

Kushagra Verma, Baron Lonner, Laura Dean, David Vecchione, Kathryn Kean "Predictors of Postoperative Infection In Spine Deformity Surgery – Which Curves Are At Greatest Risk?" *Bull Hosp Jt Dis 2013*, 71(4): 257-64

Kushagra Verma, Sapan D. Gandhi, Mitchell Maltenfort, Todd Albert, Alan Hilibrand, Alexander Vaccaro, Kristin Radcliff "The Rate of Adjacent Segment Disease in Cervical Disc Arthoplasty Versus Single Level Fusion: A Meta-Analysis of Prospective Studies" *Spine 2013*, *Dec 15;38(26):2253-7*

Anthony Boniello, **Kushagra Verma**, Julie Sees, Freedman Miller, Kirk Dabney "Delayed Abdominal Compartment Syndrome Following Posterior Spinal Fusion with Unit Rod Instrumentation: Case Report and Literature Review" *Spinal Deformity* 2013, Nov; 1(6): 464-7

Kushagra Verma, David Vecchione, Laura Dean, Thomas Errico, Baron Lonner "Reduction of MAP during surgical exposure safely reduces operative blood loss and transfusion requirements in AIS" *Spine Deformity* 2013, Mar; 1(2):115-122

Marc Ialenti, Baron Lonner, **Kushagra Verma**, Laura Dean, Thomas Errico "Estimating operating blood loss in AIS: Can blood loss be predicated?" *JPO* 2013, Jun; 33(4):372-6

Jonathan Berliner, **Kushagra Verma**, Baron Lonner, Neil Bharucha, Phedra Penn,. "Discriminative validity of the Scoliosis Research Society 22 questionnaire among five curve-severity subgroups of adolescents with idiopathic scoliosis" *Spine J*, 2013 Feb;(13)2:127-133

Per Trobisch, Pedro Ricart, **Kushagra Verma** "Clinical and demographic characteristics of online community members – Does it represent reality?" *The Spine J.* 2011 Sep;11(9): 826-31

Kushagra Verma, Baron Lonner, Kristin Kean, Laura Dean, Antonio Valdevit "Maximal pulmonary recovery after spinal fusion for adolescent idiopathic scoliosis: Does surgical approach have a lasting effect?" *Spine J.* 2011 Jun 15;36(14):1086-95

Kushagra Verma, Joshua Auerbach, Kristin E Kean, Firas Chamas, Matthew Vorsanger, Baron S Lonner "Anterior spinal fusion for thoracolumbar scoliosis: Comprehensive assessment of radiographic, clinical, and pulmonary outcomes on 2 years follow-up" *J Pediatr Orthop.* 2010 Oct-Nov;30(7):664-9.

Kushagra Verma, Thomas Errico, Kenneth Vaz, Baron S Lonner, "A prospective, randomized, double-blinded control study comparing blood loss prevention of tranexamic acid (TXA) to epsilon aminocaproic acid (EACA) for corrective spinal surgery" *BMC Surg.* 2010 Apr 6;10:13

Kushagra Verma, Lonner BS, Jane Hoashi, Itzhak Engel, Laura Dean, Yael Goldstein "Demographic factors affect SRS-22 performance in healthy adolescents: A comparative baseline for adolescent idiopathic scoliosis" *Spine* 2010 Nov 15;35(24):2134-9*

Kenneth Vaz, **Kushagra Verma**, Themi Protopsaltis, Frank Schwab, Baron Lonner, Thomas Errico "Bone Grafting Options for Lumbar Spine Surgery: A Review Examining Clinical Efficacy and Complications" *IJSS* 2010,4;75-86

Book Chapters (8)

Kushagra Verma, Baron Lonner, Thomas Errico "Untreated Late-Onset Idiopathic Scoliosis and Revision Surgery in Adults" *Harms Study Group (Submitted 2/2019)*

Casey A. Slattery, **Kushagra Verma**, Sam Sokol, Sigurd Berven "Sagittal Plane Malalignment and Degenerative Scoliosis in the Aging Spine" *Spine Surgery in an Aging Population: Surgical and Non-Surgical Options, Thieme Publishers (In Press, 2019)*

John Oren, **Kushagra Verma**, John K. Houten, and Thomas J. Errico. "History of Spinal Instrumentation - The Modern Era". *Benzel, Spine Surgery 4thEdition, Ch.2 (2016)*

Kushagra Verma, Alan S. Hilibrand "Cervical traction and reduction techniques" *Clinical Decision Support System: Spine Surgery (2015)*

Carly Comer, **Kushagra Verma**, Suken A. Shah. "Infantile Scoliosis" *Clinical Decision Support System: Spine Surgery (2015)*

Eitan Kohan, **Kushagra Verma**, John Abraham. "Complications of Sacropelvic Reconstruction for Tumor" *Spine Instrumentation*, 2nd Edition. Ch47 (2015)

Kushagra Verma, Jeffrey Rihn, Alexander Vaccaro. "Transfacet, Translaminar, and Cortical Screw Fixation of the Lumbar Spine." *Lumbar Spine Surgery, Jaypee Publishers (2014)*

Kushagra Verma, John K. Houten, and Thomas J. Errico. "History of Spinal Instrumentation - The Modern Era". *Benzel, Spine Surgery 3rd Edition, Ch.2* (2012)

Non-Peer Reviewed Publications (5)

Manuscripts (2)

Sapan D. Gandhi, **Kushagra Verma**, Todd Albert, Alan Hilibrand, Alexander Vaccaro, Kristin Radcliff "How Often is Adjacent Segment Disease Reported? A Systematic Review of Prospective Studies Comparing Total Disc Arthoplasty vs. ACDF" (*Seminars in Spine Surgery*, 2013 Sept; 25(13): 205-208)

Christina Gutowski, **Kushagra Verma**, Suken A. Shah, Peter Gabos "Its Always Sunny In The Operating Room: The Effects of Weather on Operative Pediatric Volume at One Institution" (*Jefferson Orthopaedic Society Journal, May, 2014*)

Media/Other (3)

Kushagra Verma "Rheumatoid Arthritis Are at Increased Risk of Joint Damage in the Neck" US News and World Report, July 28thm 2017

Kushagra Verma. "Turning Compassion Into Action: A Medical Student's Perspective" *FOCOS Annual Report (2008-2009)*

Kushagra Verma, Sourav Bhunia. "Evaluation of the Abiocor motor efficiency using a continuous flow hydraulic test" *Abiomed Registry, Company Confidential (2002)*

Presentations (89)

Baron Lonner, **Kushagra Verma**, Yuan Ren, Chanland Roonprapunt, Ahmet Alanay, Mohamad Bazerbashi, Mark A. Buehler, Manoj K Kodigudla, Amey V. Kelkar, Vijay Goel "The Transverse Process Trajectory Technique- A New Pathway to the Thoracic Pedicle in the Deformed Spine" *Submitted to Scoliosis Research Society (SRS): 2018*

Lori A. Dolan, Stuart L. Leslie Weinstein, Prakash Sitoula, **Kushagra Verma**, Kenneth J. Rogers, Suken A. Shah, Mark F. Abel, Oheneba Boachie-Adjei, Jacques L. D'Astous, Matthew B Dobbs Dobbs, John B/ Emans, John M. Flynn, Daniel W. Green, Matthew F. Halsey, Kim W. Hammerberg, Michael T. Hresko, Henry J. Iwinski, Antony Kallur, Walter F. Krengel, Charles T. Mehlman, Peter O. Newton, Jean A. Ouellet, Nigel J. Price, Christopher W. Reilly, James O. Sanders, Michael L Schmitz, Richard M. Schwend, Peter F. Sturm, W. Timothy Ward "Development and Validation of Prognostic Model Using the Sanders Maturity Stage in Untreated AIS" *Submitted to Scoliosis Research Society (SRS): 2018*

Podium (35)

Prakash Sitoula MD, **Kushagra Verma MD**, Peter G. Gabos MD, James O. Sanders, Kenneth J. Rogers PhD, Suken A. Shah MD "Correlation of the Sanders Skeletal Maturity Stage with Risser Stage in Adolescents with Idiopathic Scoliosis" *American Academy of Orthopaedic Surgeons* (AAOS): 2018

Prakash Sitoula MD, **Kushagra Verma MD**, Peter G. Gabos MD, James O. Sanders, Kenneth J. Rogers PhD, Suken A. Shah MD "Correlation of the Sanders Skeletal Maturity Stage with Risser Stage in Adolescents with Idiopathic Scoliosis" *Scoliosis Research Society (SRS): 2017*

Deeptee Jain, **Kushagra Verma**, Jun Mizutani, Bobby Tay, Shane Burch, Vedat Deviren "Stand-alone minimally invasive lateral lumbar interbody fusion for the treatment of adjacent segment disease: a case series" *Society of Lateral Access Surgeons (SOLAS): 2016*

Kushagra Verma, Deeptee Jain, Vedat Deviren Multilevel Stand Alone Anterior Interbody Fusion: A Comprehensive Assessment of Radiographic, Operative, And Clinical Outcomes With Up to Two Years Follow-Up" *Society of Lateral Access Surgeons (SOLAS): 2016*

Eric Padegimas, Benjamin Zmistowski, **Kushagra Verma**, James Purtill "What Factors Affect Inpatient Charges for Total Joint Arthroplasty - Is it Quality?" *American Academy of Orthopaedic Surgeons (AAOS): 2015*

Benjamin Zmistowski, **Kushagra Verma**, Eric Padegimas, James Purtill "Medicare Reimbursement for Total Joint Arthroplasty: What are the Driving Forces?" *American Academy of Orthopaedic Surgeons (AAOS): 2015*

Kushagra Verma, Eric Padegimas, Benjamin Zmistowski, Suken A. Shah, Todd Albert, Alexander Vaccaro, Kristen Radcliff, Alan Hilibrand "How Does State Income and The Number of Uninsured Patients Relate To Hospital Charges For Spine Care?" *Eastern Orthopaedic Association (EOA): 2014*

Kushagra Verma, Suken A. Shah, Firoz Miyanji, Peter O. Newton, Burt Yaszay, Maty Petcharaporn, Tracey Bastrom, Unni Narayanan, Paul D. Sponseller "Restoring Sagittal Balance Improves Clinical Outcomes For Cerebral Palsy Patients with Spinal Deformity" *Eastern Orthopaedic Association (EOA): 2014*

Kushagra Verma, Senthil Nathan, Yuan Ren, Baron Lonner, Suken A. Shah A Normative Baseline For The SRS-22 From Over 1000 Healthy Adolescents In South East Asia: Which Demographic Factors Affect Outcome? *Eastern Orthopaedic Association (EOA): 2014*

Eric Padegimas, Benjamin Zmistowski, **Kushagra Verma**, James Purtill "What Factors Affect Inpatient Charges for Total Joint Arthroplasty" *Eastern Orthopaedic Association (EOA): 2014* *Awarded EOA resident travel grant

Kushagra Verma, Suken A. Shah, Geraldine Neiss, Petya Yorgova, Leok Lim Lau, Firoz Miyanji, Peter O. Newton, Burt Yaszay, Maty Petcharaporn, Tracey Bastrom, Unni Narayanan, Paul D. Sponseller "Restoring Sagittal Balance Improves Clinical Outcomes For Non-Ambulatory Cerebral Palsy Patients with Spinal Deformity" *International Meeting for Advanced Spine Techniques (IMAST): 2014*

Danielle Ponzio, **Kushagra Verma**, Mitchell Malenfort, David Pedowitz, Steven Raikin "Does Post-Operative Bunion Taping Prevent Recurrence?" *Jefferson Orthopaedic Society (JOS): 2014*

Prakash Sitoula, **Kushagra Verma**, Laurens Holmes Jr, Peter G. Gabos, James O. Sanders, Petya Yorgova, Geraldine Neiss, Kenneth Rogers, Suken A. Shah "The Simplified Skeletal Maturity Method and its Correlation with Curve Progression in Idiopathic Scoliosis" *Association of Spine Surgeon of India (ASSICON): 2014*

Danielle Ponzio, **Kushagra Verma**, Mitchell Malenfort, David Pedowitz, Steven Raikin "Does Post-Operative Bunion Taping Prevent Recurrence?" *American Academy of Orthopaedic Surgeons (AAOS): 2014*

Austin Peters, **Kushagra Verma**, Kseniya Slobodyanyuk, Thomas Cheriyan, Baron S. Lonner, Thomas Errico "Antifibrinolytics Reduce Blood Loss In Adult Spinal Deformity Surgery: A prospective, Randomized Trial" *American Academy of Orthopaedic Surgeons (AAOS): 2014*

Kushagra Verma, Christina Gutowski, Eleanor Lewin, James Costanzo, Peter Gabos "Its Always Sunny In The Operating Room: The Effects of Weather on Operative Pediatric Volume at One Institution" *Eastern Orthopaedic Association (EOA): 2013*

Prakash Sitoula, **Kushagra Verma**, Laurens Holmes Jr, Peter G. Gabos, James O. Sanders, Petya Yorgova, Geraldine Neiss, Kenneth Rogers, Suken A. Shah "The Simplified Skeletal Maturity Method and its Correlation with Curve Progression in Idiopathic Scoliosis" *Eastern Orthopaedic Association (EOA): 2013*

Austin Peters, **Kushagra Verma**, Kseniya Slobodyanyuk, Thomas Cheriyan, Baron S. Lonner, Thomas Errico "Antifibrinolytics Reduce Blood Loss In Adult Spinal Deformity Surgery: A prospective, Randomized Trial" *North American Spine Society (NASS): 2013*** *Finalist, Best Clinical Paper*

Prakash Sitoula, **Kushagra Verma**, Laurens Holmes Jr, Peter G. Gabos, James O. Sanders, Petya Yorgova, Geraldine Neiss, Kenneth Rogers, Suken A. Shah "The Simplified Skeletal Maturity Method and its Correlation with Curve Progression in Idiopathic Scoliosis" *Scoliosis Research Society (SRS): 2013*

Austin Peters, **Kushagra Verma**, Kseniya Slobodyanyuk, Thomas Cheriyan, Baron S. Lonner, Thomas Errico "Antifibrinolytics Reduce Blood Loss In Adult Spinal Deformity Surgery: A prospective, Randomized Trial" *Scoliosis Research Society (SRS): 2013*

*Finalist, Russell Hibbs Award, Best Clinical Research Paper

Kushagra Verma, Sapan D. Gandhi, Todd Albert, Alan Hilibrand, Alexander Vaccaro, Kristin Radcliff "The Rate of Adjacent Segment Disease in Cervical Disc Arthoplasty Versus Single Level Fusion: A Systematic Review of Prospective Studies" *International Meeting for Advanced Spine Techniques (IMAST): 2013*

Kushagra Verma, Sapan D. Gandhi, Todd Albert, Alan Hilibrand, Alexander Vaccaro, Kristin Radcliff "The Rate of Adjacent Segment Disease in Cervical Disc Arthoplasty Versus Single Level Fusion: A Systematic Review of Prospective Studies" *American Academy of Orthopaedic Surgeons (AAOS): 2013*

Kushagra Verma, Sapan D. Gandhi, Todd Albert, Alan Hilibrand, Alexander Vaccaro, Kristin Radcliff "The Rate of Adjacent Segment Disease in Cervical Disc Arthoplasty Versus Single Level Fusion: A Systematic Review of Prospective Studies" *Cervical Spine Research Society (CSRS): 2012 *Selected for an Invited Publication to The Spine Journal*

Kushagra Verma, Thomas Errico, Neil Bharucha, Chris Diefenbach, Laura Dean, Joseph Dryer, Tessa Huncke, Kirstin Boenigk, Baron S. Lonner "Do Intra-Operative Antifibrinolytics Reduce Blood Loss in Adolescent Idiopathic Scoliosis? A Prospective Randomized Comparison_North American Spine Society (NASS): 2011*Finalist for Best Clinical Paper

Kushagra Verma, Thomas Errico, Neil Bharucha, Chris Diefenbach, Laura Dean, Joseph Dryer, Tessa Huncke, Kirstin Boenigk, Baron S. Lonner "Do Intra-Operative Antifibrinolytics Reduce Blood Loss in Adolescent Idiopathic Scoliosis? A Prospective Randomized Comparison. *International Meeting on Advanced Spine Techniques (IMAST): 2011*

Kushagra Verma, Laura Dean, David Vecchione, Joshua Auerbach, Antonio Valdevit, Kathryn Kean, Baron Lonner "Comprehensive assessment of factors predictive of post-operative infection in 942 spinal deformity cases: Can we identify patients at greatest risk?" *American Academy of Orthopaedic Surgeons (AAOS): 2011*

Kushagra Verma, Thomas Errico, Neil Bharucha, Chris Diefenbach, Laura Dean, Joseph Dryer, Tessa Huncke, Kirstin Boenigk, Baron S. Lonner "Do Intra-Operative Antifibrinolytics Reduce Blood Loss in Adolescent Idiopathic Scoliosis? A Prospective Randomized Comparison *Scoliosis Research Society (SRS): 2010 *Recipient of Russell Hibbs Award, Best Clinical Research Paper*

Kushagra Verma, Laura Dean, David Vecchione, Joshua Auerbach, Antonio Valdevit, Kathryn Kean, Baron Lonner "Comprehensive assessment of factors predictive of post-operative infection in 942 spinal deformity cases: Can we identify patients at greatest risk?" *International Meeting on Advanced Spine Techniques (IMAST): 2010*

Kushagra Verma, Antonio Valdevit, Laura Dean, Kristin Kean, Shaun Xavier, Joshua Auerbach, Baron Lonner "Maximal pulmonary recovery after spinal fusion for adolescent idiopathic scoliosis: does surgical approach have a lasting effect?" *North American Spine Society (NASS):* 2009

Kushagra Verma, David Vecchione, Laura Dean, Joshua Auerbach, Baron Lonner "Reduction of MAP during surgical exposure safely reduces operative blood loss and transfusion requirements" *International Meeting on Advanced Spine Techniques (IMAST): 2009*

Firas M. Kara, **Kushagra Verma**, Shaun Xavier, Jonathan Kamerlink, Thorsten Kirsch, and Thomas Errico "Epsilon aminocaproic and transexamic acid decrease osteoblast differentiation and mineralization in vitro" *Global Spine Congress (GSC): 2009*

Shaun Xavier, **Kushagra Verma**, Jane Hoashi, Joshua Landa, Joshua Auerbach, Thomas Errico, Baron Lonner. "Height increase following spinal fusion for AIS: Can postoperative height be predicted?" *Global Spine Congress (GSC): 2009*

Firas M. Kara, **Kushagra Verma**, Shaun Xavier, Jonathan Kamerlink, Thorsten Kirsch, and Thomas Errico "Epsilon aminocaproic and transexamic acid decrease osteoblast differentiation and mineralization in vitro" *Lumbar Spinal Research Society (LSRS):2009*

Kushagra Verma, Joshua Auerbach, Kristin E Kean, Firas Chamas, Matthew Vorsanger, Baron S Lonner "Anterior spinal fusion for thoracolumbar scoliosis: Comprehensive assessment of radiographic, clinical, and pulmonary outcomes on 2 years follow-up" *American Academy of Orthopaedic Surgeons (AAOS): 2009*

Carina Sorinson, Carolina Cernicica, Linda Rolnitzky, **Kushagra Verma**, Ross Basch, Judith Goldberg, Peter Shamamian. "The green tea derived catechin EGCG decreases peripheral blood endothelial lineage cells in tumor-bearing mice." *NYU Cancer Institute Retreat: 2005*

Poster (56)

Baron Lonner, Yuan Ren, Chanland Roonprapunt, Ahmet Alanay, **Kushagra Verma**, Mohamad Bazerbashi, Mark A. Buehler, Manoj K Kodigudla, Amey V. Kelkar, Vijay Goel "The Transverse Process Trajectory Technique- A New Pathway to the Thoracic Pedicle in the Deformed Spine" *Congress of Neurological Surgeons (CNS): 2016*

Kushagra Verma, Deeptee Jain, Vedat Deviren Multilevel Stand Alone Anterior Interbody Fusion: A Comprehensive Assessment of Radiographic, Operative, And Clinical Outcomes With Up to Two Years Follow-Up" *AO Spine, Fellows Meeting: 2016*

Kushagra Verma, Suken A. Shah, Firoz Miyanji, Peter O. Newton, Burt Yaszay, Maty Petcharaporn, Tracey Bastrom, Unni Narayanan, Paul D. Sponseller "Restoring Sagittal Balance Improves Clinical Outcomes For Cerebral Palsy Patients with Spinal Deformity" *Pediatric Orthopaedic Society of North America (POSNA): 2016*

Baron Lonner, Yuan Ren, **Kushagra Verma**, Robert Merrill "Transverse Process Trajectory Technique- A New Technique for Thoracic Pedicle Screw Placement: Early Results in Adolescent Idiopathic Scoliosis" *EuroSpine:* 2016

Deeptee Jain, **Kushagra Verma**, Jun Mizutani, Bobby Tay, Shane Burch, Vedat Deviren "Stand-alone minimally invasive lateral lumbar interbody fusion for the treatment of adjacent segment disease: a case series" *Spineweek: 2016*

Baron Lonner, Yuan Ren, **Kushagra Verma**, Robert Merrill "Transverse Process Trajectory Technique- A New Technique for Thoracic Pedicle Screw Placement: Early Results in Adolescent Idiopathic Scoliosis" *North American Spine Society (NASS): 2015*

Baron Lonner, Chanland Roonprapunt, Yuan Ren, Ahmet Alanay, **Kushagra Verma**, Vijay Goel "The Transverse Process Trajectory Technique- A New Pathway to the Thoracic Pedicle in the Deformed Spine" *North American Spine Society (NASS): 2015*

John D. Koerner, Dessislava Markova, Makarand V. Risbud, **Kushagra Verma**, Gregory D. Schroeder, D.G. Anderson, Christopher K. Kepler "The Effects of Substance P Administration on the Intervertebral Disc in a Rat Organ Culture Model" *American Academy of Orthopaedic Surgeons (AAOS): 2015*

John D. Koerner, Dessislava Markova, Makarand V. Risbud, Gregory D. Schroeder, **Kushagra Verma**, Alexander Vaccaro, Todd Albert, D.G. Anderson, Christopher K. Kepler "Local Tumor Necrosis Factor Alpha Decreases Fusion Rates in a Rat Model" *American Academy of Orthopaedic Surgeons (AAOS): 2015*

Eric Padegimas, Benjamin Zmistowski, **Kushagra Verma**, James Purtill "What Factors Affect Inpatient Charges for Total Joint Arthroplasty - Is it Quality?" *Pennsylvania Orthopaedic Society (POS): 2015*

Benjamin Zmistowski, Eric Padegimas, **Kushagra Verma**, James Purtill "Medicare Reimbursement for Total Joint Arthroplasty: What are the Driving Forces?" *Pennsylvania Orthopaedic Society (POS): 2015*

Eric Padegimas, Benjamin Zmistowski, **Kushagra Verma**, Julie Shaner, Michael Howley, James Purtill "What Drives Inpatient Charges for Total Joint Arthroplasty" *American Association of Hip And Knee Surgeons (AAHKS): 2014*

Kushagra Verma, Eric Padegimas, Alexander Vaccaro, Todd Albert, Suken A. Shah, Alan Hilibrand, Jeffrey Rihn, Satyendra Verma, Kristen Radcliff "How Does State Income and The Number of Uninsured Patients Relate To Hospital Charges For Spine Care?" *North American Spine Society (NASS): 2014*

Leok Lim Lau, **Kushagra Verma**, Geraldine Neiss, Petya Yorgova, Suken A. Shah "Restoration of Kyphosis and Thoracic Symmetry: Does it Improve Pulmonary Function in AIS?" *Scoliosis Research Society (SRS): 2014*

Kushagra Verma, Eric Padegimas, Alexander Vaccaro, Todd Albert, Suken A. Shah, Alan Hilibrand, Jeffrey Rihn, Satyendra Verma, Kristen Radcliff "How Does State Income and The Number of Uninsured Patients Relate To Hospital Charges For Spine Care?" *Scoliosis Research Society (SRS): 2014*

Kushagra Verma, Senthil Nathan, Yuan Ren, Baron Lonner, Suken A. Shah A Normative Baseline For The SRS-22 From Over 1000 Healthy Adolescents In South East Asia: Which Demographic Factors Affect Outcome? *Scoliosis Research Society (SRS): 2014*

Christina Gutowski, **Kushagra Verma**, Eleanor Lewin, Peter Gabos, Suken Shah "Its Always Sunny In The Operating Room: The Effects of Weather on Operative Pediatric Volume at One Institution" *Pediatric Orthopaedic Society Association of North America (POSNA): 2014*

Prakash Sitoula, **Kushagra Verma**, Laurens Holmes Jr, Peter G. Gabos, James O. Sanders, Petya Yorgova, Geraldine Neiss, Kenneth Rogers, Suken A. Shah "The Simplified Skeletal Maturity Method and its Correlation with Curve Progression in Idiopathic Scoliosis. *Pediatric Orthopaedic Society Association of North America (POSNA): 2014*

Eric Padegimas, **Kushagra Verma**, James Purtill "Charges and Reimbursements for Joint Reconstruction: What Variation Exists between American Hospitals?" *American Association of Hip and Knee Surgeons (AAHKS): 2013*

Kushagra Verma, Austin Peters, Chris Diefenbach, Christian Hoelscher, Joseph Dryer MD, Tessa Huncke, Kirstin Boenigk, Thomas Errico, Baron S. Lonner "Pre-Operative Autologous Blood Donation Does Not Affect Pre-Incision Hematocrit in AIS Patients. A Retrospective Cohort of A Prospective Randomized Trial" *North American Spine Society (NASS): 2013*

Kushagra Verma, Peter Gabos, Prakash Sitoula, James Sanders, Suken Shah "Inter and Intra-Observer Reliability of The Simplified Skeletal Maturity Scoring System: An Analysis of 275 patients" *Eastern Orthopaedic Association (EOA): 2013*

Kushagra Verma, Peter Gabos, Prakash Sitoula, James Sanders, Suken Shah "Inter and Intra-Observer Reliability of The Simplified Skeletal Maturity Scoring System: An Analysis of 275 patients" *Scoliosis Research Society (SRS): 2013*

Kushagra Verma, Eleanor Lewin, James Costanzo, Peter Gabos "Its Always Sunny In The Operating Room: The Effects of Weather on Operative Pediatric Volume at One Institution" *Philadelphia Orthopaedic Trauma Symposium (POTS): 2013*

Christopher Diefenbach, Neil Bharucha, **Kushagra Verma**, Joseph Dryer, Tessa Huncke, Kirstin Boenigk, Baron S. Lonner, Thomas Errico. "Does Measuring Hematocrit During Surgery Predict Blood Loss?" *Spinal Arthoplasty Society (SAS): 2011*

Kushagra Verma, Baron Lonner, Neil Bharucha, Jennifer Ahn, Akilah King, Jadie DeTolla, Bettye Wright, Oheneba Boachie-Adjei. "Does The SRS-22 'Work' In West Africa? A Comparison of Adolescents with and Without Idiopathic Scoliosis" *International Meeting on Advanced Spine Techniques (IMAST): 2010*

Kushagra Verma, Baron Lonner, Jonathan Berliner, Neil Bharucha, Phedra Penn. "Does the SRS-22 Correlate with Curve Severity in Adolescent Idiopathic Scoliosis? An Age and Gender Matched Comparison" *International Meeting on Advanced Spine Techniques (IMAST): 2010*

Christopher Diefenbach, Neil Bharucha, **Kushagra Verma**, Joseph Dryer, Tessa Huncke, Kirstin Boenigk, Baron S. Lonner, Thomas Errico. "Does Measuring Hematocrit During Surgery Predict Blood Loss?" *International Meeting on Advanced Spine Techniques (IMAST): 2010*

Shaun Xavier, Zair Fishkin, Jonathan R. Kamerlink, **Kushagra Verma**, Antonio Valdevit, Thomas Errico "The Influence of Total Disc Arthroplasty Baseplate Design on Endplate Subsidence/Compression" *International Meeting on Advanced Spine Techniques (IMAST): 2010*

Kushagra Verma, Laura Dean, David Vecchione, Joshua Auerbach, Antonio Valdevit, Kathryn Kean, Baron Lonner "Comprehensive assessment of factors predictive of post-operative infection in 942 spinal deformity cases: Can we identify patients at greatest risk?" *American Academy of Orthopaedic Surgeons (AAOS): 2010*

Kushagra Verma, Laura Dean, David Vecchione, Joshua Auerbach, Michael Walsh, Thomas Errico, Baron Lonner "Estimating operating blood loss in AIS: Can blood loss be predicated?" *American Academy of Orthopaedic Surgeons (AAOS): 2010*

Firas M. Kara, **Kushagra Verma**, Shaun Xavier, Jonathan Kamerlink, Thorsten Kirsch, and Thomas Errico "Epsilon aminocaproic and transexamic acid decrease osteoblast differentiation and mineralization in vitro" *International Society for the Study of the Lumbar Spine (ISSLS): 2009*

Kushagra Verma, David Vecchione, Laura Dean, Joshua Auerbach, Baron Lonner "Reduction of MAP during surgical exposure safely reduces operative blood loss and transfusion requirements" *North American Spine Society (NASS): 2009*

Kushagra Verma, Itzhak Engel, Laura Dean, Joshua Auerbach, Yael Goldstein, Jane Hoashi, Baron Lonner "BMI, gender, income, and household status affect SRS-22 performance in healthy adolescents without scoliosis" *North American Spine Society (NASS): 2009*

Kushagra Verma, Jonathan Kamerlink, Shaun Xavier, Marc Ialenti, Antonio Valdevit, David Feldman, Joseph Dryer, Baron Lonner, Thomas Errico "Predictors of operative blood loss in patients with neuromuscular scoliosis undergoing spinal fusion." *North American Spine Society (NASS): 2009*

Kushagra Verma, Laura Dean, David Vecchione, Joshua Auerbach, Antonio Valdevit, Kathryn Kean, Baron Lonner "Comprehensive assessment of factors predictive of post-operative infection in 942 spinal deformity cases: Can we identify patients at greatest risk?" *North American Spine Society (NASS): 2009*

Shaun Xavier, **Kushagra Verma**, Jane Hoashi, Joshua Landa, Joshua Auerbach, Thomas Errico, Baron Lonner. "Height increase following spinal fusion for AIS: Can postoperative height be predicted?" *North American Spine Society (NASS): 2009*

Firas M. Kara, **Kushagra Verma**, Shaun Xavier, Jonathan Kamerlink, Thorsten Kirsch, and Thomas Errico "Epsilon aminocaproic and transexamic acid decrease osteoblast differentiation and mineralization in vitro" *North American Spine Society (NASS): 2009*

Jonathan Kamerlink, **Kushagra Verma**. Shaun Xavier, Marc Ialenti, Antonio Valdevit, David Feldman, Joseph Dryer, Baron Lonner, Thomas Errico "Cost analysis of neuromuscular scoliosis correction surgery in 73 consecutive cases." *North American Spine Society (NASS): 2009*

Firas M. Kara, **Kushagra Verma**, Shaun Xavier, Jonathan Kamerlink, Thorsten Kirsch, and Thomas Errico "Epsilon aminocaproic and transexamic acid decrease osteoblast differentiation and mineralization in vitro" *International Meeting on Advanced Spine Techniques (IMAST): 2009*

Kushagra Verma, Antonio Valdevit, Laura Dean, Kristin Kean, Shaun Xavier, Joshua Auerbach, Baron Lonner "Maximal pulmonary recovery after spinal fusion for adolescent idiopathic scoliosis: does surgical approach have a lasting effect?" *International Meeting on Advanced Spine Techniques (IMAST): 2009*

Kushagra Verma, Itzhak Engel, Laura Dean, Joshua Auerbach, Yael Goldstein, Jane Hoashi, Baron Lonner "BMI, gender, income, and household status affect SRS-22 performance in healthy adolescents without scoliosis" *International Meeting on Advanced Spine Techniques* (IMAST): 2009

Kushagra Verma, Jonathan Kamerlink, Shaun Xavier, Marc Ialenti, Antonio Valdevit, David Feldman, Joseph Dryer, Baron Lonner, Thomas Errico "Predictors of operative blood loss in patients with neuromuscular scoliosis undergoing spinal fusion." *International Meeting on Advanced Spine Techniques (IMAST): 2009*

Kushagra Verma, Laura Dean, David Vecchione, Joshua Auerbach, Michael Walsh, Thomas Errico, Baron Lonner "Estimating operating blood loss in AIS: Can blood loss be predicated?" *International Meeting on Advanced Spine Techniques (IMAST): 2009*

Kushagra Verma, David Vecchione, Laura Dean, Joshua Auerbach, Baron Lonner "Reduction of MAP during surgical exposure safely reduces operative blood loss and transfusion requirements" *Scoliosis Research Society (SRS): 2009*

Shaun Xavier, **Kushagra Verma**, Jane Hoashi, Joshua Landa, Joshua Auerbach, Thomas Errico, Baron Lonner. "Height increase following spinal fusion for AIS: Can postoperative height be predicted?" *International Meeting on Advanced Spine Techniques (IMAST): 2009*

Jonathan Kamerlink, **Kushagra Verma**, Shaun Xavier, Marc Ialenti, Antonio Valdevit, David Feldman, Joseph Dryer, Baron Lonner, Thomas Errico "Cost analysis of neuromuscular scoliosis correction surgery in 73 consecutive cases." *International Meeting on Advanced Spine Techniques (IMAST): 2009*

Firas M. Kara, **Kushagra Verma**, Shaun Xavier, Jonathan Kamerlink, Thorsten Kirsch, and Thomas Errico "Epsilon aminocaproic and transexamic acid decrease osteoblast differentiation and mineralization in vitro" *Scoliosis Research Society (SRS): 2009*

Kushagra Verma, David Vecchione, Laura Dean, Joshua Auerbach, Baron Lonner "Reduction of MAP during surgical exposure safely reduces operative blood loss and transfusion requirements" *Global Spine Congress (GSC): 2009*

Kushagra Verma, Laura Dean, David Vecchione, Joshua Auerbach, Antonio Valdevit, Kathryn Kean, Baron Lonner "Comprehensive assessment of factors predictive of post-operative infection in 942 spinal deformity cases: Can we identify patients at greatest risk?" *Global Spine Congress* (GSC): 2009

Kushagra Verma, Itzhak Engel, Laura Dean, Joshua Auerbach, Yael Goldstein, Jane Hoashi, Baron Lonner "BMI, gender, income, and household status affect SRS-22 performance in healthy adolescents without scoliosis" *Global Spine Congress (GSC): 2009*

Kushagra Verma, Laura Dean, David Vecchione, Joshua Auerbach, Michael Walsh, Thomas Errico, Baron Lonner "Estimating operating blood loss in AIS: Can blood loss be predicated?" *Global Spine Congress (GSC): 2009*

Kushagra Verma, Jonathan Kamerlink, Shaun Xavier, Marc Ialenti, Antonio Valdevit, David Feldman, Joseph Dryer, Baron Lonner, Thomas Errico "Predictors of operative blood loss in

patients with neuromuscular scoliosis undergoing spinal fusion." *Global Spine Congress (GSC):* 2009

Jonathan Kamerlink, **Kushagra Verma**. Shaun Xavier, Marc Ialenti, Antonio Valdevit, David Feldman, Joseph Dryer, Baron Lonner, Thomas Errico "Cost analysis of neuromuscular scoliosis correction surgery in 73 consecutive cases." *Global Spine Congress (GSC): 2009*

Carina Sorinson, Carolina Cernicica, Linda Rolnitzky, **Kushagra Verma**, Ross Basch, Judith Goldberg, Peter Shamamian. "The green tea derived catechin EGCG decreases peripheral blood endothelial lineage cells in tumor-bearing mice." *American Association for Cancer Research* (AACR): 2006

Ashley Roman, Jeremy Schreher, **Kushagra Verma**, Peter Nathanielsz and David Fishman. "The effect of omega-3 fatty acid supplementation on MMP expression in cultured decidual cells: Dietary implications for preventing preterm birth" *Society for Maternal-Fetal Medicine (SMFM)*: 2005

Victoria Minior, Brian Levine, Seth Guller, Asaf Ferber, **Kushagra Verma**, Peter Nathanielsz, Michael Divon. "Antenatal Fetal Hypoxemia Gradually Increases Fetal Nucleated Red Blood Cells in a Rat Model." *Society for Maternal-Fetal Medicine (SMFM): 2004*