

Curriculum Vitae

SUKEN A. SHAH, MD

Nemours/Alfred I. duPont Hospital for Children
Department of Orthopaedics
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CLINICAL APPOINTMENTS:

Alfred I. duPont Hospital for Children, Department of Orthopaedics
Wilmington, Delaware
Attending Pediatric Orthopaedic Surgeon (2000-present)
Division Chief, Spine and Scoliosis Service (2010-present)
Clinical Fellowship Director (2009-present)

Thomas Jefferson University, Department of Orthopaedic Surgery
Philadelphia, Pennsylvania
Associate Professor of Orthopaedic Surgery and Pediatrics

POST GRADUATE TRAINING:

Alfred I. duPont Hospital for Children, Department of Orthopaedics
Wilmington, Delaware
Fellowship in Pediatric Orthopaedics, 1999-2000

Thomas Jefferson University, Department of Orthopaedic Surgery
Rothman Institute
Philadelphia, Pennsylvania
Residency in Orthopaedic Surgery, 1995-1999
Chief Resident, 1998-1999

The Pennsylvania Hospital, Department of Surgery
Philadelphia, Pennsylvania
Internship in General Surgery, 1994-1995

EDUCATION:

Jefferson Medical College of Thomas Jefferson University
Philadelphia, Pennsylvania
M.D. Degree (Cum Laude): June, 1994

The Pennsylvania State University
University Park, Pennsylvania
B.S. Degree (Science with Honors): August, 1990

Cherry Hill High School East
Cherry Hill, New Jersey
Graduated Summa Cum Laude: June, 1987

HONORS / AWARDS:

Best Doctors in America (2007-2012)
Scoliosis Research Society Traveling Fellowship
American Academy of Orthopaedic Surgeons Achievement Award
Spinal Deformity Educational Group Advancement Award
Nemours Quality of Care Award of Excellence
Virtua Health Humanitarian Award
American Orthopaedic Association / Zimmer Resident Research Award
New Investigator Recognition Award – Orthopaedic Research Society
Alpha Omega Alpha Honor Medical Society
Grand Marshall – Jefferson Medical College Commencement
Sandoz Student Service Award – JMC Student Council President
Lange Medical Publications Award
Hobart Amory Hare Medical Honor Society
NIH Summer Scholar Research Fellowship
William Potter Research Award
Sigma Xi Society Award for Outstanding Research

CERTIFICATION:

American Board of Orthopaedic Surgery: 2002, re-certified 2012

MEDICAL LICENSURE:

Pennsylvania
Delaware
New Jersey

SOCIETY MEMBERSHIPS:

Scoliosis Research Society
Board of Directors (2011-present)
Program Committee (2011-present, Chair)
Education Committee (2012-present)
Worldwide Course Committee (2009-2012)
Research Council (2011-2012)
Growing Spine Committee (2009-present, Past-Chair)
Education Committee (2012-present)
Awards and Scholarships Committee (2012-present)
Policies and Bylaws Committee (2006-2009)
Pediatric Orthopaedic Society of North America
Finance Council (2010-present)
One Day Course Committee (2011-2013, Chair)
Research Committee (2009-2011)
Industry Relations Committee (2008-present, Chair)
Endowment Committee (2010-present)
Setting Scoliosis Straight Foundation (Board of Directors 2009-present)
Harms Study Group
Growing Spine Study Group
Fox Pediatric VCR Study Group
Russell Hibbs Society
American Academy of Orthopaedic Surgeons

American Medical Association
Medical Society of Delaware
Delaware Society of Orthopaedic Surgeons
Secretary/Treasurer (2008-present)
Jefferson Orthopaedic Society

JOURNAL REVIEWER:

Spine
Journal of Pediatric Orthopaedics
Journal of Spine Deformity
Journal of Orthopaedic Science
Scoliosis

PUBLICATIONS:

Butler C., Campos M., Sill H., Shah SA, Gardner T., Hollis T. "Histamine H₁ Receptor Mediates Decrease in Glomerular Surface Area of Filtration in Histamine-Infused Diabetic Rats," *FASEB Journal*, 42: 1990, 285.

Sill H., Shah S.A., Hollis T. "Shear Stress Patterns in Cultured Bovine Endothelial Cells," *FASEB Journal*, 42: 1990, 326.

Sinha R.K., Shah S.A., Tuan R.S. "Differential Attachment of Human Osteoblasts Upon Commonly Used Orthopaedic Implant Materials," *Jeff Orthop J*, 20: 1991, 67-74.

Sinha R.K., Shah S.A., Tuan R.S. "Cell Spreading and Attachment of Human Osteoblasts to Metallic Substrates," *J Cell Biol*, 115: 1991, 448.

Sinha R.K., Morris F., Shah S.A., Tuan R.S.. "Surface Composition of Orthopaedic Implant Materials Regulates Cell Adhesion, Spreading, and Cytoskeletal Organization of Primary Human Osteoblasts in Vitro," *Clin Orthop*, 305: 1994, 258-272.

Lin S.S., Shah S.A., Pizzutillo P.D., Tuan R.S. "In Vivo Efficacy of Antibiotic Delivery Using a Biodegradable Drug Delivery System," *Jeff Orthop J*, 22: 1993, 103-109.

Lane G.J., Hozack W.J., Shah S.A., Rothman R.H., Booth R.E., Eng K., Smith P. "Simultaneous Bilateral Versus Unilateral Total Knee Arthroplasty: An Outcomes Analysis," *Clin Orthop*, 345: 1997, 106-112.

Kupcha P.C., Shah S.A. "Posterior Tibial Tendon Dysfunction as a Cause of Acquired Flatfoot in Adults," *Del Med J*, 69: 255-257, 1997.

Shah S.A. Kupcha P.C. "Posterior Tibial Tendon Dysfunction as a Cause of Acquired Flatfoot in Adults," *Jeff Orthop J*, 26: 1997, 86-89.

Lane G.J., Shah S.A., Hozack W.J., Rothman R.H., Booth R.E., Eng K., Smith P. "Simultaneous Bilateral Versus Unilateral Total Knee Arthroplasty: An Analysis of Relative Risk, Complications and Cost," *Jeff Orthop J*, 26: 1997, 64-68.

Becker C.E., Keeler K.A., Kruse R.W., Shah S.A. "Complications of Blade Plate Removal," *J Ped Orthop*, 19(2): 1999, 188-193.

Anderson S.A., Shah S.A., Bowen J.R. "Humeral Lengthening and Intraoperative Neurophysiologic Monitoring Techniques: A Case Report and Review of the Literature," *Jeff Orthop J*, 29: 2000, 47-53.

PUBLICATIONS: (continued)

Sinha R.K., Shah S.A., Hume E.L., Tuan R.S. "The Effect of a Five Day Space Flight on the Immature Rat Spine," *Spine J*, 2(4): 239-241, 2002.

Mehta D.I., He Z., Shah S.A., Dabney K.W., Miller F., Dalal J.F.T., Koletty S. "Ischemia-Reperfusion and Acute Pancreatitis after Posterior Spinal Fusion," *J Ped Gastroenterol Nutr*, 35: 462-466, 2002.

Tsirikos A.I., Shah S.A., Riddle E., Stanton R.P. "Transphyseal Fracture-Dislocation of the Femoral Neck," *J Orthop Trauma*, 17: 648-653, 2003.

Shah S.A., Tsirikos A.I., Chang W., Miller F. "Acquired Atlantoaxial Instability in Pediatric Patients With Spastic Cerebral Palsy," *J Ped Orthop*, 23(3): 335-341, 2003.

Tsirikos A.I., Shah S.A., Chang W.N., Dabney K.W., Miller F. "Preserving Ambulatory Potential in Pediatric Patients With Cerebral Palsy Who Undergo Spinal Fusion Using Unit Rod Instrumentation," *Spine*, 28: 480-484, 2003.

Riddle E., Bowen J.R., Shah S.A., Moran E., Lawall H.J. "The duPont Kyphosis Brace for the Treatment of Adolescent Scheuermann's Kyphosis," *J South Orthop Assoc*, 12(3): 135-140, 2003.

DiCindio S., Theroux M., Shah S.A., Miller F., Dabney K.W., Brislin R.P., Schwartz, D. "Multimodality Monitoring of Transcranial Electric Motor and Somatosensory-Evoked Potentials During Surgical Correction of Spinal Deformity in Patients With Cerebral Palsy and Other Neuromuscular Disorders," *Spine*, 28: 1851-1855, 2003.

Lehman R.A., Shah S.A. "Tension-Sided Femoral Neck Stress Fracture in a Skeletally Immature Patient," *J Bone Joint Surg Am*, 86: 1292-1295, 2004.

He Z., Tonb D.J., Miller F., Dabney K.W., Shah S.A., Brenn B.R., Theroux M., Mehta D.I., "Cytokine Release, Pancreatic Injury, and Risk of Acute Pancreatitis after Spinal Fusion Surgery," *Dig Dis Sci* 49(1):143-9, 2004.

Takemitsu M., Mackenzie W.G., Taliwal R.V., Woratanarat P., Shah S.A., "The Treatment of Cervical Instability and Stenosis in Skeletal Dysplasia," submitted to *J Bone Joint Surg Am*.

El Rassi G., Takemitsu M., Woratanarat P., Shah S.A., "Lumbar Spondylolysis in Pediatric and Adolescent Soccer Players," *Am J Sports Med*, 33(11): 1688-1693, 2005.

Potter B.K., Kirk K.L., Shah S.A., Kuklo T.R., "Loss of Coronal Correction Following Instrumentation Removal in Adolescent Idiopathic Scoliosis," *Spine*, 31(1): 67-72, 2006.

Takemitsu M., Shah S.A., El Rassi G., Woratanarat P. "Low Back Pain in Pediatric Athletes with Unilateral Tracer Uptake at the Pars Interarticularis on Single Photon Emission Computed Tomography (SPECT)," *Spine* 31(8): 909-914, 2006.

Senaran H, Shah S.A., Glutting J.W., Dabney K.W., Miller F., "The Associated Effects of Untreated Unilateral Hip Dislocation in Cerebral Palsy Scoliosis," *J Pediatr Orthop* 26(6): 769-72, 2006.

El Rassi G., Shah S.A., "Dynamic Scapholunate Dissociation in a Child," *Hand Surg* 11(1-2): 55-57, 2006.

DePass K., Shah S.A., "Elastic Intramedullary Nails," *J Orthop Trauma* 20(9): 646-7, 2006.

PUBLICATIONS: *(continued)*

Mehlman C.T., Shah S.A., Dobbs M.B., Chan D.P., “2005 Scoliosis Research Society Asian Traveling Fellowship: Report to the Education Committee,” *Spine* 31(20):2288, 2006.

Shah S.A., “Derotation of the Spine,” *Neurosurg Clin N Am* 18(2):339-45, 2007.

Senaran H., Shah S.A., Presedo A., Dabney K.W., Miller F., “The Risk of Progression of Scoliosis in Cerebral Palsy Patients after Intrathecal Baclofen Therapy,” *Spine* 32(21): 2348-54, 2007.

Schwartz D.M., Auerbach J.D., Dormans J.P., Flynn J., Drummond D.S., Bowe J.A., Laufer S., Shah S.A., Bowen J.R., Pizzutillo P.D., Jones K.J., “Neurophysiological Detection of Impending Spinal Cord Injury During Scoliosis Surgery,” *J Bone Joint Surg Am* 89(11): 2440-9, 2007.

Senaran H., Shah S.A., Gabos P.G., Littleton A.G., Neiss G., Guille J.T., “Difficult Thoracic Pedicle Screw Placement in Adolescent Idiopathic Scoliosis,” *J Spinal Disord Tech* 21(3): 187-191, 2008.

Borowski A, Shah S.A., Littleton AG, Dabney KW, Miller F. “Baclofen Pump Implantation and Spinal Fusion in Children: Techniques and Complications,” *Spine* 33(18): 1995-2000, 2008.

Fallon J, Ricci A, Shah S.A., “Multiple Osteochondritis Desiccans Lesions within the Knee of an Immature Gymnast on Growth Hormone Supplementation,” *Current Orthop Prac* 19(5): 582-585, 2008.

Borkhuu B, Borowski A, Shah S.A., Littleton AG, Dabney KW, Miller F. “Antibiotic-Loaded Allograft Decreases the Rate of Deep Wound Infection after Posterior Spinal Fusion in Children with Cerebral Palsy,” *Spine* 33(21):2300-4, 2008.

Sponseller PD, Shah S.A., Abel MF, Sucato D, Newton PO, Shufflebarger H, Lenke LG, Letko L, Betz R, Marks M, Bastrom T, The Harms Study Group. “Scoliosis surgery in cerebral palsy: differences between unit rod and custom rods,” *Spine* 34(8):840-844, 2009.

Lonner BS, Auerbach JD, Boachie-Adjei O, Shah S.A., Hosogane N, Newton PO. “Treatment of thoracic scoliosis: are monoaxial thoracic pedicle screws the best form of fixation for correction?” *Spine* 34(8):845-51, 2009.

Upasani VV, Chambers RC, Dalal AH, Shah S.A., Lehman RA Jr, Newton PO. “Grading apical vertebral rotation without a computed tomography scan: a clinically relevant system based on the radiographic appearance of bilateral pedicle screws,” *Spine* 34(17): 1855-62, 2009.

Sankar WN, Skaggs DL, Emans JB, Marks DS, Dormans JP, Thompson GH, Shah S.A., Sponseller PD, Akbarnia BA. “Neurologic risk in growing rod spine surgery in early onset scoliosis: is neuromonitoring necessary for all cases?” *Spine* 34(18):1952-5, 2009.

Sponseller PD, Shah S.A., Abel MF, Newton PO, Letko L, Marks M. “Infection rate after spine surgery in cerebral palsy is high and impairs results: multicenter analysis of risk factors and treatment,” *Clin Orthop Rel Res* 468(3): 711-6, 2010.

Helgeson MD, Shah S.A., Newton PO, Clements DH, Betz RR, Marks MC, Bastrom T, Harms Study Group. “Evaluation of proximal junctional kyphosis in adolescent idiopathic scoliosis following pedicle screw, hook or hybrid instrumentation,” *Spine* 35(2): 177-81, 2010.

Borowski A, Littleton AG, Borkhuu B, Presedo A, Shah S.A., Dabney KW, Lyons S, McMannus M, Miller F. “Complications of intrathecal baclofen pump therapy in pediatric patients,” *J Pediatr Orthop* 30(1): 76-81, 2010.

PUBLICATIONS: *(continued)*

Shah S.A., Borkhuu B, Littleton AG, Keller MS, Kuester V, Dodge GR. “Can a bone marrow-based graft replacement result in similar fusion rates as rib autograft in anterior interbody fusion procedures for adolescent thoracolumbar scoliosis?” *J Spine Disord Tech* 23(1):57-62, 2010.

Yang JS, McElroy MJ, Akbarnia BH, Salari P, Oliveira D, Thompson GH, Emans JB, Yazici M, Skaggs DL, Shah S.A., Kostial PN, Sponseller PD. “Growing rods for spinal deformity: Characterizing consensus and variation in current use,” *J Pediatr Orthop* 30(3):264-70, 2010.

Mohamed Ali MH, Koutharawu DN, Miller F, Dabney K, Gabos P, Shah S.A., Holmes L. “Operative and clinical markers of deep wound infection after spine fusion in children with cerebral palsy,” *J Pediatr Orthop* 30(8):851-7, 2010.

Bess S, Akbarnia BA, Thompson GH, Sponseller PD, Shah S.A., El Sebaie H, Boachie-Adjei O, Karlin LI, Canale S, Poe-Kochert C, Skaggs DL. “Complications of growing-rod treatment for early onset scoliosis: An analysis of one hundred and forty patients,” *J Bone Joint Surg Am* 92(15):2533-43, 2010.

Farooq N, Garrido E, Altaf F, Dartnell J, Shah S.A., Tucker SK, Noordeen MH. “Minimizing complications with single submuscular growing rods: A review of technique and results on 88 patients with minimum two-year follow-up,” *Spine* 35(25): 2252-8, 2010.

Atanda A, Shah S.A., O’Brien K. “Osteochondrosis: Common causes of pain in growing bones,” *Am Fam Physician* 83(3):258-91, 2011.

Dalal A, Upasani VV, Bastrom TP, Yaszay B, Shah S.A., Shufflebarger HL, Newton PO. “Apical vertebral rotation in adolescent idiopathic scoliosis: Comparison of uniplanar and polyaxial pedicle screws,” *J Spinal Disord Tech* 24(4):251-7, 2011.

Sankar WN, Skaggs DL, Yazici M, Johnston CE, Shah S.A., Javidan P, Kadakia RV, Day TF, Akbarnia BA. “Lengthening of dual growing rods and the law of diminishing returns,” *Spine* 36(10): 806-9, 2011.

Schwartz DM, Sestokas AK, Dormans JP, Vaccaro AR, Hilibrand AS, Flynn JM, Li PM, Shah S.A., Welch W, Drummond DS, Albert TJ. “Transcranial electric motor-evoked potential monitoring during spine surgery: Is it safe?” *Spine* 36(13):1046-9, 2011.

Tsutsui S, Pawelek JB, Bastrom TP, Shah S.A., Newton PO. “Do discs “open” anteriorly with posterior-only correction of Scheuermann’s kyphosis?” *Spine* 36(16): E1086-92, 2011.

Noordeen HM, Shah S.A., Elsebaie HB, Garrido E, Farooq N, Al Mukhtar M. “In vivo distraction force and length measurements of growing rods: which factors influence the ability to lengthen?” *Spine* 36(26): 2299-303, 2011.

Yang JS, Sponseller PD, Thompson GH, Akbarnia BA, Emans JB, Yazici M, Skaggs DL, Shah S.A., “Growing rod fractures: Risk factors and opportunities for prevention,” *Spine* 36(20): 1639-44, 2011.

Yaszay B, O’Brien M, Shufflebarger HL, Betz RR, Lonner B, Shah S.A., Boachie-Adjei O, Crawford A, Letko L, Harms J, Gupta MC, Sponseller PD, Abel MF, Flynn J, Macagno A, Newton PO. “Efficacy of hemivertebra resection for congenital scoliosis: A multicenter retrospective comparison of three surgical techniques,” *Spine* 36(24): 2052-60, 2011.

Oto M, Shah S.A., Mohammed AH, Rogers KJ, Yorgova P, Holmes L. “Effectiveness and safety of posterior titanium instrumentation in children with adolescent idiopathic scoliosis: A prospective study,” *Joint Dis Rel Surg* [Eklem Hastalik Cerrahisi] 22(3): 124-8, 2011.

Dhawale AA, Shah S.A., Sponseller PD, Bastrom T, Neiss G, Yorgova P, Newton PO, Yaszay B, Abel MF, Shufflebarger HL, Gabos PG, Dabney KW, Miller F. “Are antifibrinolytics helpful in decreasing blood loss and transfusions during spinal fusion surgery in children with cerebral palsy scoliosis?” *Spine* 37(9): E549-55, 2012.

PUBLICATIONS: *(continued)*

Sponseller PD, Jain A, Lenke LG, Shah S.A., Sucato DJ, Emans JB, Newton PO. “Vertebral column resection in children with neuromuscular spine deformity,” *Spine* 37(11): E655-61, 2012.

Lonner BS, Lazar-Antman MA, Sponseller PD, Shah S.A., Newton PO, Betz R, Shufflebarger HL. “Multivariate analysis of factors associated with kyphosis maintenance in adolescent idiopathic scoliosis,” *Spine* 37(15): 1297-302, 2012.

Oto M, Holmes L, Rogers KJ, Yilmaz G, Yorgova P, Shah S.A., “Outcomes of posterior titanium spinal instrumentation in neuromuscular scoliosis patients,” *Joint Dis Rel Surg* [Eklem Hastalik Cerrahisi] 23(1): 30-4, 2012.

Marks M, Newton PO, Petcharaporn M, Bastrom TP, Shah S.A., Betz R, Lonner B, Miyanji F. “Postoperative segmental motion of the unfused spine distal to the fusion in 100 patients with adolescent idiopathic scoliosis,” *Spine* 37(10): 826-32, 2012.

Gjolaj JP, Sponseller PD, Shah SA, Newton PO, Flynn JM, Neubauer PR, Marks MC, Bastrom TP. “Spinal deformity correction in Marfan syndrome versus adolescent idiopathic scoliosis: learning from the differences,” *Spine* 37(18):1558-1565, 2012.

Yilmaz G, Borkkhuu B, Dhawale AA, Oto M, Littleton AG, Mason DE, Gabos PG, Shah SA. “Comparative analysis of hook, hybrid and pedicle screw instrumentation in the posterior treatment of adolescent idiopathic scoliosis,” *J Pediatr Orthop* 32(5): 490-9, 2012.

Newton PO, Bastrom TP, Emans JB, Shah SA, Shufflebarger HL, Sponseller PD, Sucato DJ, Lenke LG. “Antifibrinolytic agents reduce blood loss during pediatric vertebral column resection procedures,” *Spine* 37(23): E1459-63, Aug. 2012. PMID:22872217

Thabet AM, Kowtharapu DN, Miller F, Dabney KW, Shah SA, Rogers K, Holmes L Jr. “Wrist fusion in patients with severe quadriplegic cerebral palsy,” *Musculoskelet Surg* 96(3): 199-204, Aug. 2012. PMID:22893448

McElroy MJ, Sponseller PD, Dattilo JR, Thompson GH, Akbarnia BA, Shah SA, Snyder BD, Growing Spine Study Group. “Growing rods for the treatment of scoliosis in children with cerebral palsy: a critical assessment,” *Spine* 37(24): E1504-10, Aug. 2012. PMID:22926278

Oda, JE, Shah SA, Mackenzie WG, Akbarnia BA, Yazici M, “Concurrent Tethered Cord Release and Growing-Rod Implantation-Is it Safe?”, *Global Spine*, December 2012

Lenke LG, Newton PO, Sucato DJ, Shufflebarger HL, Emans JB, Sponseller PD, Shah SA, Sides BA, Blanke KM. “Complications following 147 consecutive vertebral column resections for severe pediatric spinal deformity: a multicenter analysis,” *Spine* 38(2): 119-132, 2013.

Karatas AF, Dede O, Atanda AA, Holmes L, Rogers K, Shah SA, “Comparison of direct pars repair techniques of spondylolysis in pediatric and adolescent patients: pars compression screw versus pedicle screw-rod-hook,” *J Spinal Disord Tech* Oct. 2012.PMID23075858

Hwang SW, Samdami AF, Marks M, Bastrom T, Garg H, Lonner B, Bennet JT, Pahys J, Shah SA, Miyanji F, Shufflebarger H, Newton P, Betz R. “Five-year clinical and radiographical outcomes using pedicle screw only constructs in the treatment of adolescent idiopathic scoliosis,” *Eur Spine J* Dec. 2012 PMID:23254863

Dhawale AA, Shah SA, Reichard S, Holmes L, Brislin R, Rogers K, Mackenzie WG. “Casting for infantile scoliosis: the pitfall of increased peak inspiratory pressure,” *J Pediatr Orthop* 33(1): 63-7, Jan. 2013. PMID:23232382

PUBLICATIONS: *(continued)*

Yilmaz G, Hwang S, Oto M, Rogers KJ, Bober MB, Cahill PJ, Kruse RW, Shah SA, “Surgical treatment of scoliosis in osteogenesis imperfecta with cement augmented pedicle screw instrumentation,” *J Spinal Disord Tech* 2013

Lonner B, Yoo A, Terran JS, Sponseller P, Samdani A, Betz R, Shuffelbarger H, Shah SA, Newton P. “Effect of spinal deformity on adolescent quality of life: comparison of operative Scheuermann’s kyphosis, adolescent idiopathic scoliosis and normal controls,” *Spine* Jan. 2013 PMID: 23370683

Dhawale AA, Shah SA, Yorgova P, Neiss G, Layer DJ Jr, Rogers KJ, Gabos PG, Holmes L Jr. “Effectiveness of cross-linking posterior segmental instrumentation in adolescent idiopathic scoliosis: a 2-year follow-up comparative study”. doi:p11: S1529-9430(13)00531-7. 10.1016/j.spine. Spine J. 2013 Jun. 2013.05.022. PMID:23800823

Vitale MG, Riedel MD, Glotzbecker MP, Matsumoto H, Roye DP, Akbarnia BA, Anderson RC, Brockmeyer DL, Emans JB, Erickson M, Flynn JM, Lenke LG, Lewis SJ, Luhmann SJ, McLeod LM, Newton PO, Nyquist AC, Richards BS 3rd, Shah SA, Skaggs DL, Smith JT, Sponseller PD, Sucato DJ, Zeller RD, Saiman L. “Building Consensus: Development of a Best Practice Guideline (BPG) for Surgical Site Infections (SSI) Prevention in High –risk Pediatric Spine Surgery.” *J Pediatr Orthop.* July/August 2013 33(5):471-478. PMID:23752142

Karatas AF, Dede O, Rogers K, Ditro CP, Holmes L, Bober M, Shah SA, Mackenzie WG., *Spine* (Phila Pa 1976), “Growth-Sparing Spinal Instrumentation in Skeletal Dysplasia” 2013 Aug 5., PMID: 23921322

Robinson KG, Mendonca JL, Militar JL, Theroux MC, Dabney KW, Shah SA, Miller F, Akins RE. ,*PLoS One.* 2013 Aug 16;8(8):e70288. doi: 10.1371/journal.pone.0070288, “Disruption of Basal lamina components in neuromotor synapses of children with spastic quadriplegic cerebral palsy”. PMID: 23976945

Sponseller PD, Jain A, Shah SA, Samdani A, Yaszay B, Newton PO, Thaxton LM, Bastrom TP, Marks MC, *Spine* (Phila Pa 1976). 2013 Aug 16, “Deep Wound Infections after Spinal Fusion in Children with Cerebral Palsy: A Prospective Cohort Study”. PMID: 23963019

El Rassi G, Takemitsu M, Glutting J, Shah SA., *Am J Phys Med Rehabil.* 2013 Oct 17, “Effect of Sports Modification on Clinical Outcome in Children and Adolescent Athletes with Symptomatic Lumbar Spondylolysis”. PMID: 24141103

TEXTBOOK CHAPTERS:

Shah S.A., Vaccaro A.R., Becker C.E. "Fixed Traumatic Atlantoaxial Rotatory Deformity," in *Mastercases: Spine Surgery*, Vaccaro A.R., Albert T.J. (eds). New York: Thieme, 2000.

Shah S.A., Kramer D.L., Klein G.R., Cotler J.M. "Traumatic Injuries of the Occipitocervical Junction," in *Mastercases: Spine Surgery*, Vaccaro A.R., Albert T.J. (eds). New York: Thieme, 2000.

Klein G.R., Shah S.A., Vaccaro A.R. "Bilateral Cervical Facet Joint Dislocation without Neurologic Deficit," in *Mastercases: Spine Surgery*, Vaccaro A.R., Albert T.J. (eds). New York: Thieme, 2000.

Shah S.A. "The Hip." In *Gellis & Kagan's Current Pediatric Therapy, 17/e*, Burg F.D., Ingelfinger J.R., Polin R.A., Gershon A.A. (eds). Philadelphia: W.B. Saunders, 2002.

Shah S.A., Buono L.M., Frueh W.W., Saxena A., Vaccaro A.R. "Congenital Intraspinous Abnormalities of the Cervical, Thoracic, Lumbar and Sacral Spine." In *Principles and Practice of Spine Surgery*, Vaccaro A.R., Betz R.R., Zeidman S.M. (eds). Philadelphia: Mosby, 2003.

Shah S.A., Takemitsu M., Westerlund E., Albert T.J. "Kyphosis: Scheuermann's Disease and Congenital Deformity." In *Rothman and Simeone's The Spine, 5/e*, Herkowitz H.N., Bell G., Garfin S. (eds). Philadelphia: Lippincott Williams & Wilkins, 2005.

Shah S.A., Takemitsu M. "Posterior Surgical Anatomy and Posterior Surgical Approaches to the Thoracic Spine and Thoracolumbar Junction." In *Surgical Techniques in Spinal Instrumentation*, Vaccaro A.R., Fessler R.G., Kim D. (eds). New York: Thieme Medical Publishers Inc., 2005.

Mackenzie W.G., Shah S.A., Takemitsu M. "The Cervical Spine in Skeletal Dysplasia." In *The Cervical Spine, 4/e*, Clark C.R. (ed). Philadelphia: Lippincott Williams & Wilkins, 2005.

Shah S.A., Stankovits L.M. "The Hip." In *Current Pediatric Therapy, 18/e*, Burg F.D., Ingelfinger J.R., Polin R.A., Gershon A.A. (eds). Philadelphia: Saunders Elsevier, 2006.

Shah SA. "Scheuermann's Kyphosis." In: *Spinal Deformities: The Essentials*, Heary RF, Albert TJ, (eds). New York: Thieme, Inc., 2007.

Shah SA. Section Editor for "Systemic Disorders," *Orthopaedic Knowledge Update 9*. Rosemont, IL: American Academy of Orthopaedic Surgeons, 2008.

Shah SA., Belthur M. "Thoracoplasty for Rib Deformity." In *Spine Surgery: Operative Techniques*, Vaccaro AR and Baron E (eds). Philadelphia: Saunders/Elsevier, 2008.

Shah SA., DePass K. "Evaluation and Surgical Management of Lumbar Injuries in Children." In *Atlas of Spine Trauma: Adult and Pediatric*, Kim DH, Ludwig SC, Vaccaro AR, Chang J-C (eds). Philadelphia: Saunders/Elsevier, 2009.

Shah SA., Smith H. "Operative Treatment of Neuromuscular Spinal Deformity." In *Surgical Management of Spinal Deformities*, Errico TJ, Lonner BS, Moulton A (eds). Philadelphia: Saunders/Elsevier, 2009.

Shah SA., Oda J. "Spine Trauma." In *Orthopaedic Knowledge Update: Pediatrics 4*, Song KM (ed). Rosemont, IL: American Academy of Orthopaedic Surgeons, 2011.

Hwang S, Samdani A, Shah SA. "Kyphosis." In *Orthopaedic Knowledge Update: Pediatrics 4*, Song KM (ed). Rosemont, IL: American Academy of Orthopaedic Surgeons, 2011.

TEXTBOOK CHAPTERS: *continued*

Shah S.A. "Treatment of Spinal Deformity in Cerebral Palsy." In *The Growing Spine: Management of Spinal Disorders in Young Children*, Akbarnia BA, Yazici M, Thompson GH (eds). Berlin Heidelberg: Springer-Verlag, 2011.

Shah S.A. "Scheuerman Kyphosis." In *Scoliosis Research Society E-Textbook*, Ogilvie J (ed), 2011.
<http://etext.srs.org/book>

SCIENTIFIC PRESENTATIONS:

Butler C., Campos M., Sill H., Shah S.A., Gardner T., Hollis T. "Histamine H₁ Receptor Mediates Decrease in Glomerular Surface Area of Filtration in Histamine-Infused Diabetic Rats," Federation of American Scientists for Experimental Biology Conference, Washington, DC, 1990.

Sinha R.K., Shah S.A., Tuan R.S. "Topography of Ti6Al4V Substrates Affects Spreading and Cytoskeletal Organization of Human Osteoblasts," 4th World Biomaterials Congress, Belgium, 1992.

Lin S.S., Shah S.A., File P.I., Tuan R.S.. "A Bioresorbable Antibiotic Drug Delivery System for the Treatment of Chronic Osteomyelitis," 4th World Biomaterials Congress, Belgium, 1992.

Shah S.A., Sinha R.K., Tuan R.S. "Cell Spreading and Attachment of Human Osteoblasts to Orthopaedic Implants," American Association of Physicians from India 10th Annual Convention, Detroit, MI, 1992.

Lin S.S., Shah S.A., Pizzutillo P.D., Tuan R.S.. "In Vivo Efficacy of Antibiotic Delivery Using a Biodegradable Drug Delivery System," Orthopaedic Research Society, San Francisco, CA, 1993. (Recipient of ORS New Investigator Recognition Award)

Shah S.A., Lin S.S., Pizzutillo P.D., Tuan R.S.. "In Vivo Efficacy of Antibiotic Delivery Using a Biodegradable Drug Delivery System," American Academy of Orthopaedic Surgeons 60th Annual Meeting, San Francisco, CA, 1993.

Lin S.S., Fitzpatrick M.J., Shah S.A., Pizzutillo P.D., Hume E.L., Tuan R.S.. "Treatment of Open Fractures with IM Rods Coated with an Antibiotic-Impregnated Biodegradable Drug Delivery System," American Academy of Orthopaedic Surgeons 61st Annual Meeting, New Orleans, LA, 1994.

Lin S.S., Shah S.A., Pizzutillo P.D., Tuan R.S.. "Bioresorbable Drug Delivery System for the Treatment of Chronic Osteomyelitis," Eastern Orthopaedic Association 25th Annual Meeting, Bermuda, 1994.

Lin S.S., Charlton W.P.H., Shah S.A., Chao W., Tuan R.S. "In Vitro and In Vivo Antibiotic Release Kinetics Using a Biodegradable Delivery System Molded Onto Fracture Fixation Plates," Eastern Orthopaedic Association 25th Annual Meeting, Bermuda, 1994.

Lane G.J., Shah S.A., Hozack W.J., Rothman R.H., Booth R.E., Eng K., Smith P. "Simultaneous Bilateral Versus Unilateral Total Knee Arthroplasty: An Analysis of Relative Risk, Complications and Cost," American Association of Hip and Knee Surgeons Annual Meeting, Dallas, TX, 1996.

Lane G.J., Shah S.A., Hozack W.J., Rothman R.H., Booth R.E., Eng K., Smith P. "Simultaneous Bilateral Versus Unilateral Total Knee Arthroplasty: An Outcomes Analysis," American Academy of Orthopaedic Surgeons 63rd Annual Meeting, San Francisco, CA, 1996.

Shah S.A., Lane G.J., Hozack W.J., Rothman R.H., Booth R.E., Eng K., Smith P. "Simultaneous Bilateral Versus Unilateral Total Knee Arthroplasty: An Analysis of Relative Risk, Complications and Cost," Eastern Orthopaedic Association 28th Annual Meeting, Scottsdale, AZ, 1997.

SCIENTIFIC PRESENTATIONS: *(continued)*

Shah S.A., Vaccaro A.R., Silveri C.P., Foley K.T., Garfin S.R. “The Use of Image Guidance Technology in Transarticular Screw Fixation in the Cervical Spine,” Cervical Spine Research Society 25th Annual Meeting, Rancho Mirage, CA, 1997.

Silveri C.P., Foley K.T., Vaccaro A.R., Shah S.A., Garfin S.R. “Atlantoaxial Transarticular Screw Fixation: Risk Assessment and Bone Morphology Using an Image Guidance System,” Cervical Spine Research Society 25th Annual Meeting, Rancho Mirage, CA, 1997.

Shah S.A., Vaccaro A.R., Silveri C.P., Foley K.T., Garfin S.R. “The Use of Image Guidance Technology in Transarticular Screw Fixation in the Cervical Spine,” American Academy of Orthopaedic Surgeons 65th Annual Meeting, New Orleans, LA, 1998.

Shah S.A., Lane G.J., Hozack W.J., Rothman R.H., Booth R.E., Eng K., Smith P. “Simultaneous Bilateral Versus Unilateral Total Knee Arthroplasty: An Analysis of Relative Risk, Complications and Cost,” American Orthopaedic Association Annual Meeting, Asheville, NC, 1998. (Recipient of the AOA/Zimmer Resident Award for Outstanding Research)

Becker C.E., Keeler K.A., Kruse R.W., Shah S.A. “Complications of Blade Plate Removal,” Pediatric Orthopaedic Society of North America Annual Meeting, Cleveland, OH, 1998.

Shah S.A., Keeler K.A., Kruse R.W. “Radiographic Examination of Double Thoracic Curves in Adolescent Idiopathic Scoliosis,” Eastern Orthopaedic Association 29th Annual Meeting, San Juan, PR, 1998.

Shah S.A., Catalano J., Neuman P., Taffet R., Iannacone W. “Traumatic Dislocation of the Hip in Children and Adolescents,” Jefferson Orthopaedic Society Annual Meeting, Philadelphia, PA, 1998.

Shah S.A., Keeler K.A., Kruse R.W. “Radiographic Examination of Double Thoracic Curves in Adolescent Idiopathic Scoliosis,” American Academy of Orthopaedic Surgeons 66th Annual Meeting, Anaheim, CA, 1999.

Shah S.A., Catalano J., Neuman P., Taffet R., Iannacone W. “Traumatic Dislocation of the Hip in Children and Adolescents,” American Academy of Orthopaedic Surgeons 66th Annual Meeting, Anaheim, CA, 1999.

Shah S.A., Senthuraman V., Vaccaro A.R., Albert T.J. “Degenerative Scoliosis and Spinal Stenosis Treated with Posterior Decompression and Fusion with Instrumentation: An Outcomes Analysis,” Scoliosis Research Society 34th Annual Meeting, San Diego, CA 1999.

Shah S.A., Keeler K.A., Kruse R.W. “Radiographic Examination of Double Thoracic Curves in Adolescent Idiopathic Scoliosis,” Scoliosis Research Society 34th Annual Meeting, San Diego, CA 1999.

Shah S.A., Taliwal R.V., Mackenzie W.G. “The Treatment of Cervical Instability in Children with Skeletal Dysplasia,” Cervical Spine Research Society 27th Annual Meeting, Seattle, WA, 1999.

Shah S.A., Taliwal R.V., Mackenzie W.G. “Complications of Occipitocervical Fusion in Children with Skeletal Dysplasia,” Cervical Spine Research Society 27th Annual Meeting, Seattle, WA, 1999.

Shah S.A., Catalano J., Neuman P., Taffet R., Iannacone W. “Traumatic Dislocation of the Hip in Children and Adolescents,” Pediatric Orthopaedic Society of North America Specialty Day Meeting, Orlando, FL, 2000.

SCIENTIFIC PRESENTATIONS: *(continued)*

Shah S.A., Senthuraman V., Ciccotti M.G., Marks K.A., Schweitzer M.J. “A Prospective Analysis of the Accuracy of Knee MRI Interpretation by Orthopaedic Surgeons and Musculoskeletal Radiologists,” Pennsylvania Orthopaedic Society Spring Meeting, Orlando, FL, 2000.

Shah S.A., Taliwal R.V., Mackenzie W.G. “The Treatment of Cervical Instability in Children with Skeletal Dysplasia,” Pediatric Orthopaedic Society of North America Annual Meeting, Vancouver, BC, 2000.

Riddle E, Bowen JR, Shah SA, Moran E, Lawall HJ. “The duPont Kyphosis Brace for the Treatment of Adolescent Scheuermann’s Kyphosis,” Pediatric Orthopaedic Society of North America Annual Meeting, Vancouver, BC, 2000.

Shah S.A., Senthuraman V., Ciccotti M.G., Marks K.A., Schweitzer M.J. “A Prospective Analysis of the Accuracy of Knee MRI Interpretation by Orthopaedic Surgeons and Musculoskeletal Radiologists,” Arthroscopy Association of North America 19th Annual Meeting, Miami, FL, 2000.

Shah S.A., Senthuraman V., Vaccaro A.R., Albert T.J. “Degenerative Scoliosis and Spinal Stenosis Treated with Posterior Decompression and Fusion with Instrumentation: An Outcomes Analysis,” American Orthopaedic Association 113th Annual Meeting, Hot Springs, VA, 2000.

Shah S.A., Senthuraman V., Ciccotti M.G., Marks K.A., Schweitzer M.J. “A Prospective Analysis of the Accuracy of Knee MRI Interpretation by Orthopaedic Surgeons and Musculoskeletal Radiologists,” American Academy of Orthopaedic Surgeons 69th Annual Meeting, Dallas, TX, 2002.

Aroojis, A., Shah S.A., Bowen J.R. “Classification and Treatment of Acetabular Dysplasia in Adolescents by Triple Innominate Osteotomy,” American Academy of Orthopaedic Surgeons 69th Annual Meeting, Dallas, TX, 2002.

Shah S.A., Aroojis A., Dabney K.W., Miller F. “Intrathecal Baclofen Pump Implantation Before, After, or During Posterior Spinal Fusion in Children with Cerebral Palsy,” Pediatric Orthopaedic Society of North America Annual Meeting, Salt Lake City, UT, 2002.

Shah S.A., Aroojis A., Bowen J.R. “Classification and Treatment of Acetabular Dysplasia in Adolescents by the Triple Innominate Osteotomy,” Pediatric Orthopaedic Society of North America Annual Meeting, Salt Lake City, UT, 2002.

Shah S.A., Senthuraman V., Ciccotti M.G., Marks K.A., Schweitzer M.J. “A Prospective Analysis of the Accuracy of Knee MRI Interpretation by Orthopaedic Surgeons and Musculoskeletal Radiologists,” American Orthopaedic Association of Sports Medicine Annual Meeting, Orlando, FL, 2002.

Schwartz D.M., Drummond D.S., Bowen J.R., Sestokas A.K., Fan D., Wierzbowski L.R., Dormans J.P., Mason D.E., Mackenzie W.G., Shah S.A., Flynn J. “Provocative Testing of Segmental Artery Feed to the Anterior Spinal Cord Prior to Ligation with Transcranial Electric Motor Evoked Potentials,” Scoliosis Research Society, 37th Annual Meeting, Seattle, WA, 2002.

Shah S.A., Aroojis A., Dabney K.W., Miller F. “Intrathecal Baclofen Pump Implantation Before, After, or During Posterior Spinal Fusion in Children with Cerebral Palsy,” Scoliosis Research Society, 37th Annual Meeting, Seattle, WA, 2002.

Shah S.A., Tsirikos A.I., Miller F. “Acquired Atlantoaxial Instability in Pediatric Patients With Spastic Cerebral Palsy,” Scoliosis Research Society, 37th Annual Meeting, Seattle, WA, 2002.

Wierzbowski L.R., Schwartz, D.M., Fan D., Shah S.A. “Bicortical and Tricortical Sacral Pedicle Screw Fixation: A Potential Source of False-Positives with Stimulus Evoked EMG,” American Society of Neurophysiologic Monitoring, 14th Annual Meeting, Las Vegas, NV, 2003.

SCIENTIFIC PRESENTATIONS: *(continued)*

Tsirikos A., Shah S.A., Chang W.N., Dabney K.W., Miller F. "Spinal Fusion in Ambulatory Cerebral Palsy Patients: Can a Child Walk after Instrumentation to the Pelvis?" Pediatric Orthopaedic Society of North America Annual Meeting, Amelia Island, FL, 2003.

Shah S.A., Mehta D., He Z., Koletty S., Dabney K.W., Miller F. "The Role of Ischemia-Reperfusion Injury in Acute Pancreatitis after Scoliosis Surgery," 10th International Meeting for Advanced Spine Techniques, Rome, Italy, 2003.

Tsirikos A., Shah S.A., Chang W.N., Dabney K.W., Miller F. "Spinal Fusion in Ambulatory Cerebral Palsy Patients: Can a Child Walk after Instrumentation to the Pelvis?" 10th International Meeting for Advanced Spine Techniques, Rome, Italy, 2003.

DiCindio S., Theroux M., Shah S.A., Miller F., Dabney K.W., Brislin R.P., Schwartz, D. "Multimodality Monitoring of Transcranial Electric Motor and Somatosensory-Evoked Potentials During Surgical Correction of Spinal Deformity in Patients With Cerebral Palsy and Other Neuromuscular Disorders," Scoliosis Research Society, 38th Annual Meeting, Quebec City, Canada, 2003.

Wierzbowski L.R., Schwartz, D.M., Fan D., Shah S.A. "Bicortical and Tricortical Sacral Pedicle Screw Fixation: A Potential Source of False-Positives with Stimulus Evoked EMG," Scoliosis Research Society, 38th Annual Meeting, Quebec City, Canada, 2003.

Shah S.A., Mehta D., He Z., Koletty S., Dabney K.W., Miller F. "Etiology and Risk Factors for Acute Pancreatitis after Scoliosis Surgery," Scoliosis Research Society, 38th Annual Meeting, Quebec City, Canada, 2003.

Shah S.A., Tsirikos A., Chang W.N., Dabney K.W., Miller F. "Spinal Fusion in Ambulatory Cerebral Palsy Patients: Can a Child Walk after Instrumentation to the Pelvis?" Scoliosis Research Society, 38th Annual Meeting, Quebec City, Canada, 2003.

Akins R, Theroux M, Miller F, Dabney K, Shah S.A. "Relationship Between Neuromuscular Junction Conformation and the Level of Motor Function in Children with Cerebral Palsy," Society for Neuroscience Annual Meeting, New Orleans, LA, 2003.

Shah S.A., Tsirikos A., Chang W.N., Dabney K.W., Miller F. "Spinal Fusion in Ambulatory Cerebral Palsy Patients: Can a Child Walk after Instrumentation to the Pelvis?" American Academy of Orthopaedic Surgeons 71st Annual Meeting, San Francisco, CA, 2004.

Tsirikos A.I., Shah S.A., Chang W.N., Dabney K.W., Miller F. "Preserving Ambulatory Potential in Pediatric Patients With Cerebral Palsy Who Undergo Spinal Fusion Using Unit Rod Instrumentation," American Academy of Orthopaedic Surgeons 71st Annual Meeting, San Francisco, CA, 2004.

El Rassi G., Takemitsu M., Woratanarat P., Shah S.A., "The Outcome of Nonoperative Treatment of Spondylolysis in Pediatric and Adolescent Athletes," Pediatric Orthopaedic Society of North America Annual Meeting, St. Louis, MO, 2004.

Shah S.A., El Rassi G., Takemitsu M., Glutting J., "Lumbar Spondylolysis in Young Athletes," American Orthopaedic Society for Sports Medicine Annual Meeting, Quebec City, Canada, 2004.

Presedo A., Shah S.A., Dabney K., Miller F., "Is There an Increased Risk of Scoliosis Progression after Intrathecal Baclofen Therapy?" 11th International Meeting of Advanced Spine Techniques, Southampton, Bermuda, 2004.

Shah S.A., El Rassi G., Takemitsu M., Glutting J., "Clinical Outcome and Return to Athletics after Nonoperative Treatment of Symptomatic Spondylolysis in Children and Adolescents," 11th International Meeting of Advanced Spine Techniques, Southampton, Bermuda, 2004.

SCIENTIFIC PRESENTATIONS: *(continued)*

Potter B.K., Kirk K.L., Shah S.A., Kuklo T.K., “Loss of Coronal Correction Following Instrumentation Removal in Adolescent Idiopathic Scoliosis,” Scoliosis Research Society 39th Annual Meeting, Buenos Aries, Argentina, 2004.

Shah S.A., He Z., Dabney K.W., Miller F., Mehta D.I., “Postoperative Pancreatitis after Spinal Surgery and the Increased Risk of Sepsis and Wound Infection,” Scoliosis Research Society 39th Annual Meeting, Buenos Aries, Argentina, 2004.

El Rassi G., Takemitsu M., Woratanarat P., Glutting J., Shah S.A., “Clinical Outcome and Return to Athletics after Nonoperative Treatment of Symptomatic Spondylolysis in Children and Adolescents,” Scoliosis Research Society 39th Annual Meeting, Buenos Aries, Argentina, 2004.

Takemitsu M., Shah S.A., El Rassi G., Woratanarat P. “Low Back Pain in Pediatric Athletes with Unilateral Tracer Uptake at the Pars Interarticularis on Single Photon Emission Computed Tomography (SPECT),” Scoliosis Research Society 39th Annual Meeting, Buenos Aries, Argentina, 2004.

Takemitsu M., Mackenzie W.G., Shah S.A., “The Treatment of Cervical Instability and Stenosis in Children with Skeletal Dysplasia,” Cervical Spine Research Society, 32nd Annual Meeting, Boston, MA, 2004.

Kuklo T.K., Potter B.K., Kirk K.L., Shah S.A. “Loss of Coronal Correction Following Instrumentation Removal in Adolescent Idiopathic Scoliosis,” American Academy of Orthopaedic Surgeons 72nd Annual Meeting, Washington, DC, 2005.

Shah S.A., He Z., Dabney K.W., Miller F., Mehta D.I., “Postoperative Pancreatitis after Spinal Surgery and the Increased Risk of Sepsis and Wound Infection,” American Academy of Orthopaedic Surgeons 72nd Annual Meeting, Washington, DC, 2005.

El Rassi G., Takemitsu M., Woratanarat P., Glutting J., Shah S.A., “Clinical Outcome and Return to Athletics after Nonoperative Treatment of Symptomatic Spondylolysis in Children and Adolescents,” American Academy of Orthopaedic Surgeons 72nd Annual Meeting, Washington, DC, 2005.

Takemitsu M., Shah S.A., Jeong C., Woratanarat P., Keller M.S., “Thoracoscopic Instrumentation Surgery and Aortic Imaging in Late Onset Scoliosis,” Society for Pediatric Radiology 48th Annual Meeting, New Orleans, LA, 2005.

Shah S.A., Madigan L., “Comparison of Fulcrum Bending Radiographs and Postoperative Correction of Adolescent Idiopathic Scoliosis with Thoracic Pedicle Screws,” Second Chinese International Scoliosis Symposium, Beijing, China, 2005.

Presedo A. Shah S.A., Dabney KW, Miller F, “Complications and Risk of Scoliosis Progression After Intrathecal Baclofen Therapy in Patients with Cerebral Palsy,” 24th Meeting of the European Pediatric Orthopaedic Society, Palma de Mallorca, Spain, 2005

Shah S.A., Huss G.H., “Thoracic Pedicle Screw Instrumentation for Spinal Deformity: An Analysis of the Learning Curve in the First 100 Cases,” 12th International Meeting on Advanced Spine Techniques, Banff, Canada, 2005.

Shah S.A., Takemitsu M., Jeong C., Woratanarat P., Keller M.S., “Anatomic Position of the Aorta in Patients with Idiopathic Scoliosis After Anterior Thoracoscopic Fusion and Instrumentation Surgery,” 12th International Meeting on Advanced Spine Techniques, Banff, Canada, 2005.

Takemitsu M., Shah S.A., El Rassi G., Woratanarat P., “Low Back Pain in Pediatric Athletes with Unilateral Tracer Uptake at the Pars Interarticularis on Single Photon Emission Computed Tomography (SPECT),” 12th International Meeting on Advanced Spine Techniques, Banff, Canada, 2005.

SCIENTIFIC PRESENTATIONS: *(continued)*

Shah S.A., Presedo A., Dabney K.W., Miller F., “The Risk of Scoliosis Progression after Intrathecal Baclofen Therapy in Cerebral Palsy Patients,” 12th International Meeting on Advanced Spine Techniques, Banff, Canada, 2005.

Shah S.A., “Safety and Technical Feasibility of Bone Marrow Aspiration in Children and Adolescents,” 12th International Meeting on Advanced Spine Techniques, Banff, Canada, 2005.

Shah S.A., He Z., McCloskey J., Tonb D.J., Dabney K.W., Miller F., Brenn B.R., Theroux M., Mehta D.I., “The Effect of Aprotinin on Intraoperative Blood Loss, Splanchnic Hypoperfusion and Other Complications in Spinal Surgery for Neuromuscular Scoliosis,” 12th International Meeting on Advanced Spine Techniques, Banff, Canada, 2005.

Guille J.T., Senaran H., Gabos P.G., Neiss G., Shah S.A., “Difficult Pedicle Screw Placement in the Thoracic Spine,” 12th International Meeting on Advanced Spine Techniques, Banff, Canada, 2005.

Madigan L., Neiss G., Huss G.K., Shah S.A., “A Prospective Comparison of Coronal Deformity Correction in Thoracic Scoliosis Using Segmental Thoracic Pedicle Screw Instrumentation and Fulcrum-Bending Radiographs,” 12th International Meeting on Advanced Spine Techniques, Banff, Canada, 2005.

Shah S.A., Senaran H., Presedo A., Dabney K.W., Miller F., “The Risk of Scoliosis Progression after Intrathecal Baclofen Therapy in Cerebral Palsy Patients,” 40th Annual Meeting of the Scoliosis Research Society, Miami, FL, 2005.

Shah S.A., “Safety and Technical Feasibility of Bone Marrow Aspiration in Children and Adolescents,” 40th Annual Meeting of the Scoliosis Research Society, Miami, FL, 2005.

Shah S.A., He Z., McCloskey J., Tonb D.J., Dabney K.W., Miller F., Brenn B.R., Theroux M., Mehta D.I., “The Effect of Aprotinin on Intraoperative Blood Loss, Splanchnic Hypoperfusion and Other Complications in Spinal Surgery for Neuromuscular Scoliosis,” 40th Annual Meeting of the Scoliosis Research Society, Miami, FL, 2005.

Shah S.A., “Overuse Injuries in Pediatric and Adolescent Athletes,” R.O.Y. Warren Memorial Medical Seminar, Wilmington, DE, 2005. Published at PedsEducation.org (http://www.pedseducation.org/online_education/20060703/index.html).

Madigan L., Neiss G., Huss G.K., Shah S.A., “Comparison of Coronal Deformity Correction in Thoracic Scoliosis with Thoracic Pedicle Screw Instrumentation and Fulcrum-Bending Radiographs,” 73rd Annual Meeting of the American Academy of Orthopaedic Surgeons, Chicago, IL, 2006.

Shah S.A., Senaran H., Presedo A., Dabney K.W., Miller F., “Scoliosis Progression after Intrathecal Baclofen Therapy in Cerebral Palsy,” 73rd Annual Meeting of the American Academy of Orthopaedic Surgeons, Chicago, IL, 2006.

Shah S.A., He Z., McCloskey J., Tonb D.J., Dabney K.W., Miller F., Brenn B.R., Theroux M., Mehta D.I., “The Effect of Aprotinin on Complications in Spinal Surgery for Neuromuscular Scoliosis,” 73rd Annual Meeting of the American Academy of Orthopaedic Surgeons, Chicago, IL, 2006.

Shah S.A., Huss G.H., “Thoracic Pedicle Screw Instrumentation for Spinal Deformity: An Analysis of the Learning Curve in the First 100 Cases,” Pediatric Orthopaedic Society of North America Annual Meeting, San Diego, CA, 2006.

Shah S.A., He Z., McCloskey J., Tonb D.J., Dabney K.W., Miller F., Brenn B.R., Theroux M., Mehta D.I., “The Effect of Aprotinin on Intraoperative Blood Loss, Splanchnic Hypoperfusion and Other Complications in Spinal Surgery for Neuromuscular Scoliosis,” Pediatric Orthopaedic Society of North America Annual Meeting, San Diego, CA, 2006.

Senaran H., Shah S.A., Presedo A., Dabney K.W., Miller F., “The Effect of Intrathecal Baclofen Therapy on Scoliosis in Cerebral Palsy,” Pediatric Orthopaedic Society of North America Annual Meeting, San Diego, CA, 2006.

SCIENTIFIC PRESENTATIONS: *(continued)*

Senaran H., Shah S.A., Dabney K.W., Miller F., “The Associated Effects of Unilateral Hip Dislocation in Cerebral Palsy Scoliosis,” Pediatric Orthopaedic Society of North America Annual Meeting, San Diego, CA, 2006.

Shah S.A., Senaran H., Presedo A., Dabney K.W., Miller F., “Scoliosis Progression after Intrathecal Baclofen Therapy in Cerebral Palsy,” 25th Annual Meeting of the European Pediatric Orthopaedic Society, Dresden, Germany, 2006.

Shah S.A., “Do Modern Techniques Alter Indications or Outcomes for Pediatric Scoliosis Surgery?: Pedicle Screws,” Scoliosis Research Society Pre-Meeting Course, Monterey, CA, 2006.

Senaran H., Shah S.A., Glutting J., Dabney K.W., Miller F., “Scoliosis in Cerebral Palsy: Natural History and Risk Factors for Progression,” Scoliosis Research Society, 41st Annual Meeting, Monterey, CA, 2006.

Senaran H., Shah S.A., Dabney K.W., Miller F., “The Associated Effects of Unilateral Hip Dislocation in Cerebral Palsy Scoliosis,” Scoliosis Research Society, 41st Annual Meeting, Monterey, CA, 2006.

Shah S.A., Senaran H., Glutting J., Dabney K.W., Miller F., “The Natural History of Scoliosis in Children with Spastic Quadriplegic Cerebral Palsy,” American Academy of Orthopaedic Surgeons 74th Annual Meeting, San Diego, CA, 2007.

Gallina J.T., Shah S.A., Campbell J.W., Mackenzie W.G., “Atlantoaxial Transarticular Screw Fixation in Pediatric Patients,” American Academy of Orthopaedic Surgeons 74th Annual Meeting, San Diego, CA, 2007.

Senaran H., Shah S.A., Dabney K.W., Miller F., “The Associated Effects of Unilateral Hip Dislocation in Cerebral Palsy Scoliosis,” American Academy of Orthopaedic Surgeons 74th Annual Meeting, San Diego, CA, 2007.

Shah S.A., Borkhuu B., Littleton A.G., Belthur M.V., Mason D.E., Gabos P.G., “Pedicle Screw Versus Hook Versus Hybrid Instrumentation in PSF for AIS – A Minimum 2 Year Follow Up Comparative Study,” Pediatric Orthopaedic Society of North America Annual Meeting, Hollywood, FL, 2007.

Shah S.A., Gallina J.T., Campbell J.W., Mackenzie W.G., “Atlantoaxial Transarticular Screw Fixation in Pediatric Patients,” Pediatric Orthopaedic Society of North America Annual Meeting, Hollywood, FL, 2007.

Guille J.T., D’Andrea L.P., Lonner B.S., Shah S.A., Porter S., “Anterior Treatment of Structural Thoracolumbar and Lumbar Curves: A Comparison of Dual vs. Single-rod Constructs in 100 Patients,” 14th International Meeting on Advanced Spine Techniques, Bahamas, 2007.

Shah S.A., Newton P.O., Betz R.R., Clements D.H., Shufflebarger H.L., Lowe T.G., Crawford A.H., “Evolution of Thoracic Pedicle Screws in AIS over a Ten Year Period: Are the Outcomes Better?” 14th International Meeting on Advanced Spine Techniques, Bahamas, 2007.

Shah S.A., Sponseller P.D., Abel M.F., Newton P.O., Sucato D.J., Letko L., Betz R.R., “Feasibility of Neuromonitoring for Cerebral Palsy Scoliosis and the Outcome of Neurological Complications” 14th International Meeting on Advanced Spine Techniques, Bahamas, 2007.

Helgeson M.D., Shah S.A., Betz R.R., Clements D.H., Newton P.O., Bastrom T., Marks M.C., “Evaluation of Proximal Junctional Kyphosis in Adolescent Idiopathic Scoliosis Following Pedicle Screw, Hook and Hybrid Instrumentation” 14th International Meeting on Advanced Spine Techniques, Bahamas, 2007.

Shah S.A., Sponseller P.D., Abel M.F., Newton P.O., Sucato D.J., Letko L., Betz R.R., “Anterior/Posterior Spinal Surgery for Cerebral Palsy Scoliosis: Staged or Same Day?” 14th International Meeting on Advanced Spine Techniques, Bahamas, 2007.

SCIENTIFIC PRESENTATIONS: *(continued)*

Shah S.A., Borkhuu B., Littleton A.G., Belthur M.V., Mason D.E., Gabos P.G., “Pedicule Screw Versus Hook Versus Hybrid Instrumentation in PSF for AIS – A Minimum 2 Year Follow Up Comparative Study,” 14th International Meeting on Advanced Spine Techniques, Bahamas, 2007.

Shah S.A., Borkhuu B., Littleton A.G., Dodge G. “Pedicule Screw Versus Hook Versus Hybrid Instrumentation in PSF for AIS – A Minimum 2 Year Follow Up Comparative Study,” 14th International Meeting on Advanced Spine Techniques, Bahamas, 2007.

Shah S.A., Newton P.O., Betz R.R., Clements D.H., Shufflebarger H.L., Lowe T.G., Crawford A.H., “Evolution of Thoracic Pedicle Screws in AIS over a Ten Year Period: Are the Outcomes Better?” Scoliosis Research Society 42nd Annual Meeting, Edinburgh, Scotland, 2007.

Shah S.A., Sponseller P.D., Abel M.F., Newton P.O., Sucato D.J., Letko L., Betz R.R., “The Feasibility of Neuromonitoring for Cerebral Palsy Scoliosis and the Outcome of Neurological Complications” Scoliosis Research Society 42nd Annual Meeting, Edinburgh, Scotland, 2007.

Helgeson M.D., Shah S.A., Betz R.R., Clements D.H., Newton P.O., Bastrom T., Marks M.C., “Evaluation of Proximal Junctional Kyphosis in Adolescent Idiopathic Scoliosis Following Pedicle Screw, Hook and Hybrid Instrumentation” Scoliosis Research Society 42nd Annual Meeting, Edinburgh, Scotland, 2007.

Shah S.A., Sponseller P.D., Abel M.F., Newton P.O., Sucato D.J., Letko L., Betz R.R., “Anterior/Posterior Spinal Surgery for Cerebral Palsy Scoliosis: Staged or Same Day?” Scoliosis Research Society 42nd Annual Meeting, Edinburgh, Scotland, 2007.

Sponseller P.D., Shah S.A., Abel M.F., Newton P.O., Sucato D.J., Letko L., Betz R.R., Shufflebarger, H.L., D’Andrea, L.P., Clements, D.H., Marks, M.C., “Scoliosis Surgery in Cerebral Palsy: Differences Between Unit Rod and Custom Rods,” Scoliosis Research Society 42nd Annual Meeting, Edinburgh, Scotland, 2007.

Schwartz, D.M., Dormans, J.P., Drummond, D.S., Devlin, V.J., Shah, S.A., Crawford, A.H., Beiner, J.M., Nachwalter, R.S., Dorsky, S.G., Durrani, A.A., Sestokas, A.K., Albert, T.J., “Transcranial Electric Motor Evoked Potential Monitoring During Spine Surgery: Is it Safe?” Scoliosis Research Society 42nd Annual Meeting, Edinburgh, Scotland, 2007.

Sponseller, P.D., Shah, S.A., Abel, M.F., Newton, P.O., Sucato, D.J., Letko, L., Betz, R.R., Shufflebarger, H.L., D’Andrea, L.P., Clements, D.H., Marks, M.C., “Infection after Spine Surgery in Cerebral Palsy: Risk Factors and Treatment,” Scoliosis Research Society 42nd Annual Meeting, Edinburgh, Scotland, 2007.

Borkhuu B., Littleton A.G., Belthur M.V., Mason D.E., Gabos P.G., Shah S.A., “Pedicule Screw Versus Hook Versus Hybrid Instrumentation in PSF for AIS – A Minimum 2 Year Follow Up Comparative Study,” European Pediatric Orthopaedic Society / International Federation Pediatric Orthopaedic Societies Combined Annual Meeting, Sorrento, Italy, 2007.

Senaran H., Shah S.A., Glutting J., Dabney K.W., Miller F., “Scoliosis in Cerebral Palsy: Natural History and Risk Factors for Progression,” European Pediatric Orthopaedic Society / International Federation Pediatric Orthopaedic Societies Combined Annual Meeting, Sorrento, Italy, 2007.

Shah S.A., Sponseller P.D., Abel M.F., Newton P.O., Sucato D.J., Letko L., Betz R.R., “Anterior/Posterior Spinal Surgery for Cerebral Palsy Scoliosis: Staged or Same Day?” 22nd Annual Meeting of the North American Spine Society, Austin, TX, 2007.

Lonner BS, Shah S.A., Boachie-Adjei O. “Treatment of Thoracic Scoliosis: Are Monoaxial Thoracic Pedicle Screws the Best Form of Fixation for Correction?” 22nd Annual Meeting of the North American Spine Society, Austin, TX, 2007.

SCIENTIFIC PRESENTATIONS: *(continued)*

Shah S.A., Sponseller P.D., Abel M.F., Newton P.O., Sucato D.J., Letko L., Betz R.R., “The Feasibility of Neuromonitoring for Cerebral Palsy Scoliosis and the Outcome of Neurological Complications” 22nd Annual Meeting of the North American Spine Society, Austin, TX, 2007.

Helgeson M.D., Shah S.A., Betz R.R., Clements D.H., Newton P.O., Bastrom T., Marks M.C., “Evaluation of Proximal Junctional Kyphosis in Adolescent Idiopathic Scoliosis Following Pedicle Screw, Hook and Hybrid Instrumentation” 22nd Annual Meeting of the North American Spine Society, Austin, TX, 2007.

Guille J.T., D’Andrea L.P., Lonner B.S., Shah S.A., Porter S., “Anterior Treatment of Structural Thoracolumbar and Lumbar Curves: A Comparison of Dual vs. Single-rod Constructs in 100 Patients,” 22nd Annual Meeting of the North American Spine Society, Austin, TX, 2007.

Helgeson M.D., Shah S.A., Betz R.R., Clements D.H., Newton P.O., Bastrom T., Marks M.C., “Evaluation of Proximal Junctional Kyphosis in Adolescent Idiopathic Scoliosis Following Pedicle Screw, Hook and Hybrid Instrumentation” American Academy of Orthopaedic Surgeons 75th Annual Meeting, San Francisco, CA, 2008.

Shah S.A., Newton P.O., Upasani V.V., Betz R.R., Clements D.H., Shufflebarger H.L., Bastrom T., Marks M.C., “Evolution of Thoracic Pedicle Screws in AIS over a Ten Year Period: Are the Outcomes Better?” American Academy of Orthopaedic Surgeons 75th Annual Meeting, San Francisco, CA, 2008.

Shah S.A., Sponseller P.D., Abel M.F., Newton P.O., Sucato D.J., Letko L., Betz R.R., “The Feasibility of Neuromonitoring for Cerebral Palsy Scoliosis and the Outcome of Neurological Complications,” American Academy of Orthopaedic Surgeons 75th Annual Meeting, San Francisco, CA, 2008.

Borkhuu B., Borowski A., Shah S.A., Littleton A.G., Dabney K.W., Miller F. “Antibiotic-Loaded Allograft Decreases the Rate of Deep Wound Infection after Posterior Spinal Fusion in Children with Cerebral Palsy,” American Academy of Orthopaedic Surgeons 75th Annual Meeting, San Francisco, CA, 2008.

Shah S.A., Newton P.O., Upasani V.V., Betz R.R., Clements D.H., Shufflebarger H.L., Bastrom T., Marks M.C., “Evolution of Thoracic Pedicle Screws in AIS over a Ten Year Period: Are the Outcomes Better?” Pediatric Orthopaedic Society of North America 24th Annual Meeting, Albuquerque, NM, 2008.

Shah S.A., Sponseller P.D., Abel M.F., Newton P.O., Sucato D.J., Letko L., Betz R.R., “The Feasibility of Neuromonitoring for Cerebral Palsy Scoliosis and the Outcome of Neurological Complications,” Pediatric Orthopaedic Society of North America 24th Annual Meeting, Albuquerque, NM, 2008.

Borkhuu B., Borowski A., Shah S.A., Littleton A.G., Dabney K.W., Miller F. “Antibiotic-Loaded Allograft Decreases the Rate of Deep Wound Infection after Posterior Spinal Fusion in Children with Cerebral Palsy,” Pediatric Orthopaedic Society of North America 24th Annual Meeting, Albuquerque, NM, 2008.

Bess RS, Akbarnia BA, Thompson GH, Skaggs DL, Shah S.A., Elsebaie HB, Boachie-Adjei O, Karlin LI, Canale S, Poe-Kochert C, Growing Spine Study Group. “Complications in 910 Growing Rod Surgeries: Use of Dual Rods and Submuscular Placement of Rods Decreases Complications,” Scoliosis Research Society 43rd Annual Meeting and Course, Salt Lake City, UT, 2008.

Skaggs DL, Emans JB, Marks DS, Dormans JP, Thompson GH, Shah S.A., Sponseller PD, Akbarnia BA, Growing Spine Study Group. “Neurologic Risk in Growing Rod Surgery in Children: Is Neuromonitoring Necessary in All Cases?” Scoliosis Research Society 43rd Annual Meeting and Course, Salt Lake City, UT, 2008.

O’Brien MF, Shufflebarger HL, Macagno A, Marks MC, Bastrom T, Betz RR, Newton PO, Lonner BS, Crawford AH, Shah SA., “Postoperative Left Shoulder Elevation: An Unexpected Consequence of Surgical Correction of Lenke 1 Main Thoracic Curves,” Scoliosis Research Society 43rd Annual Meeting and Course, Salt Lake City, UT, 2008.

SCIENTIFIC PRESENTATIONS: *(continued)*

Shah S.A., Ramirez-Garnica G, Ye G, Stanton RP, Celerin L. “What Factors are Important in Determining Intraoperative Blood Loss During Scoliosis Surgery?” Spinal Deformity: Current Concepts, SRS Worldwide Regional Meeting, New Delhi, India, 2008.

Shah S.A., Sponseller P.D., Abel M.F., Newton P.O., Sucato D.J., Letko L., Betz R.R., “Pelvic Fixation in Cerebral Palsy Scoliosis Results in Better Restoration of Pelvic Obliquity, Sitting Ability and a Lower Reoperation Rate: Do the Benefits Outweigh the Costs?” Spinal Deformity: Current Concepts, SRS Worldwide Regional Meeting, New Delhi, India, 2008.

Shah S.A., Newton PO, Shufflebarger HL, O’Brien MF, Betz RR, Bastrom T, Marks MC. “The Uniplanar Screw: A New Tool in the Treatment of AIS,” Spinal Deformity: Current Concepts, SRS Worldwide Regional Meeting, New Delhi, India, 2008.

Shah S.A., Sponseller P.D., Abel M.F., Newton P.O., Sucato D.J., Letko L., Betz R.R., “Pelvic Fixation in Cerebral Palsy Scoliosis Results in Better Restoration of Pelvic Obliquity, Sitting Ability and a Lower Reoperation Rate: Do the Benefits Outweigh the Costs?” Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, NV, 2009.

Shah S.A., Ramirez-Garnica G, Ye G, Stanton RP, Celerin L. “What Factors are Important in Determining Intraoperative Blood Loss During Scoliosis Surgery?” Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, NV, 2009.

Shah S.A., Newton PO, Shufflebarger HL, O’Brien MF, Betz RR, Bastrom T, Marks MC. “The Uniplanar Screw: A New Tool in the Treatment of AIS,” Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, NV, 2009.

Newton PO, Upasani VV, Schlecter J, Pawelek J, Shufflebarger HL, Sponseller PD, Lonner BS, Shah S.A., Betz RR. “Identifying the Most Important Determinants of Upper Instrumented Vertebral Selection in AIS Surgery,” Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, NV, 2009.

Takemitsu M, Mackenzie WG, Taliwal R. Woratanarat, Palocaren T, Shah S.A., “Treatment of cervical instability and stenosis in skeletal dysplasia,” European Pediatric Orthopaedic Society Annual Meeting, Lisbon, Portugal, 2009.

Shah S.A., Sponseller P.D., Abel M.F., Newton P.O., Sucato D.J., Letko L., Betz R.R., “Pelvic Fixation in Cerebral Palsy Scoliosis Results in Better Restoration of Pelvic Obliquity, Sitting Ability and a Lower Reoperation Rate: Do the Benefits Outweigh the Costs?” Pediatric Orthopaedic Society of North America 25th Annual Meeting, Boston, MA, 2009.

Shah S.A., Ramirez-Garnica G, Ye G, Stanton RP. “What Factors are Important in Determining Intraoperative Blood Loss During Scoliosis Surgery?” Pediatric Orthopaedic Society of North America 25th Annual Meeting, Boston, MA, 2009.

Shah S.A., Newton PO, Lonner BS, Betz RR, Bastrom T, Marks MC, Harms Study Group. “Longer Surgical Times May Increase Your Complication Rate,” 16th International Meeting on Advanced Spine Techniques, Vienna, Austria, 2009.

Schwartz DM, Sestokas AK, Bhalodia VM, Flynn JM, Shah S.A., Gabos PG, Bowe JA, Dormans JP. “Is the Intraoperative H-Reflex a Viable Substitute for Transcranial Electric Motor Evoked Potential (tceMEP) Monitoring in Detecting Emerging Spinal Cord Injury during Scoliosis Surgery?” 16th International Meeting on Advanced Spine Techniques, Vienna, Austria, 2009.

SCIENTIFIC PRESENTATIONS: *(continued)*

Yang JS, Sponseller PD, Akbarnia BA, Thompson GH, Kostial P, Solari P, Emans JB, Skaggs DL, Yacizi M, Shah S.A., Asher MA, Growing Spine Study Group. "Indications and Practice of Growing Rods: Characterizing Current Use," 16th International Meeting on Advanced Spine Techniques, Vienna, Austria, 2009.

Shah S.A., Fisher AO, Heck J, Shaffer TH, Theroux MC. "Tryptase Expression as a Marker of Lung Injury During Thoracoscopic Surgery: A Porcine Model of Single Lung Ventilation," 16th International Meeting on Advanced Spine Techniques, Vienna, Austria, 2009.

Yaszay B, Newton PO, Shufflebarger HL, Shah S.A., Bastrom T, Harms Study Group. "A New Indication for Ponte Releases in Adolescent Idiopathic Scoliosis: Restoring Thoracic Kyphosis," 16th International Meeting on Advanced Spine Techniques, Vienna, Austria, 2009.

Shah SA. Newton PO, Lonner BS, Shufflebarger HL, Bastrom T, Marks MC. "Rod Strength: Is it an Important Factor in Coronal and Sagittal Realignment after Surgery for Adolescent Idiopathic Scoliosis?" 16th International Meeting on Advanced Spine Techniques, Vienna, Austria, 2009.

Shah SA. Tally WC, Muzumdar A, Ingahalikar A, Moldavsky M, Khalil S. "Sequential Release of the Posterior Elements Increases Vertebral Rotation and Kyphosis Generation: A Cadaveric Study," 16th International Meeting on Advanced Spine Techniques, Vienna, Austria, 2009.

Auerbach JA, Crerand CE, Lonner BS, Shah SA. Flynn JM, Bastrom T, Bowe WP, Newton PO. "Body Image in Patients with Adolescent Idiopathic Scoliosis: Validation of the Body Image Disturbance Questionnaire-Scoliosis Version," 16th International Meeting on Advanced Spine Techniques, Vienna, Austria, 2009.

Lonner BS, Kean KE, Sponseller PD, Shufflebarger HL, Shah SA. Crawford AH, O'Brien MF, Betz RR, Newton PO. "Scheuermann Kyphosis: Prospective Evaluation of Clinical Presentation and Impact on Quality of Life in 43 Patients," 16th International Meeting on Advanced Spine Techniques, Vienna, Austria, 2009.

Marks MC, Newton PO, Betz RR, Sponseller PD, Lonner BS, Shah SA. Shufflebarger HL, Harms Study Group. "Surgical Site Infection (SSI) in Spinal Surgery: The Newest "Never" Event," 16th International Meeting on Advanced Spine Techniques, Vienna, Austria, 2009.

Shah SA. Oda JE, Yorgova P, Ali MHM, Rogers KJ, Holmes LH. "Titanium Instrumentation for the Treatment of Spinal Deformity in Children: Does the Type of Metal Matter?" 16th International Meeting on Advanced Spine Techniques, Vienna, Austria, 2009.

Oda JE, Shah SA. Mackenzie WG. "Concurrent Tethered Cord Release and Growing Rod Implantation: Is it Safe?" 16th Intl Meeting on Advanced Spine Techniques, Vienna, Austria, 2009.

Dalal AH, Newton PO, Upasani VV, Shah SA. Harms Study Group. "A Novel Method for Assessing the Axial Plane in Scoliosis Demonstrates Uniplanar Screws Outperform Polyaxial Screws," Scoliosis Research Society 44th Annual Meeting, San Antonio, TX, 2009.

Shah SA. Garrido E, Farooq N, Tucker SK, Noordeen MH. "In vivo Distraction Force and Length Measurements of Growing Rods: Which Factors Influence the Ability to Lengthen?" Scoliosis Research Society 44th Annual Meeting, San Antonio, TX, 2009.

Schwartz DM, Sestokas AK, Bhalodia VM, Wiggins CR, Flynn JM, Mackenzie WG, Shah SA. Gabos PG, Bowen JR, Crawford AH, Wall EJ, Dormans JP. "The Role of Neuromonitoring in Growing Rod and Rib-based Instrumentation Surgery," Scoliosis Research Society 44th Annual Meeting, San Antonio, TX, 2009.

SCIENTIFIC PRESENTATIONS: *(continued)*

Farooq N, Shah SA, Garrido E, Altaf F, Dartnell J, Tucker SK, Noordeen MH. “Submuscular Growing Rods: Technique, Results and Complications of 88 Patients with Minimum 2-year Follow-up,” Scoliosis Research Society 44th Annual Meeting, San Antonio, TX, 2009.

Marks MC, Newton PO, Petcharaporn M, Bastrom T, Shah SA, Betz RR, Lonner BS, Miyanji F. “A More Distal Fusion is Associated with Increased Motion at L4/L5: A Set-up for Degeneration?” Scoliosis Research Society 44th Annual Meeting, San Antonio, TX, 2009.

Lonner BS, Kean KE, Sponseller PD, Shufflebarger HL, Shah SA, Crawford AH, Betz RR, Newton PO. “Body Mass Index in Scheuermann Kyphosis: Does BMI Differ in Patients with SK vs. AIS?” Scoliosis Research Society 44th Annual Meeting, San Antonio, TX, 2009.

Shah SA, Yorgova P, Ali MHM, Rogers KJ. “Beta Tricalcium Phosphate as a Bone Graft Substitute for the Posterior Treatment of Adolescent Idiopathic Scoliosis: Results of a Prospective Clinical Study,” Scoliosis Research Society 44th Annual Meeting, San Antonio, TX, 2009.

Shah SA, Fisher AO, Heck J, Shaffer TH, Theroux MC. “Tryptase Expression as a Marker of Lung Injury During Thoracoscopic Surgery: A Porcine Model of Single Lung Ventilation,” Scoliosis Research Society 44th Annual Meeting, San Antonio, TX, 2009.

Yang JS, Sponseller PD, Akbarnia BA, Thompson GH, Kostial P, Solari P, Emans JB, Skaggs DL, Yacizi M, Shah SA, Asher MA, Growing Spine Study Group. “Indications and Practice of Growing Rods: Characterizing Current Use,” Scoliosis Research Society 44th Annual Meeting, San Antonio, TX, 2009.

Shah SA, Newton PO, Lonner BS, Betz RR, Bastrom T, Marks MC, Harms Study Group. “Longer Surgical Times May Increase Your Complication Rate,” Scoliosis Research Society 44th Annual Meeting, San Antonio, TX, 2009.

Shah SA, Tally WC, Muzumdar A, Ingahalikar A, Moldavsky M, Khalil S. “Sequential Release of the Posterior Elements Increases Vertebral Rotation and Kyphosis Generation: A Cadaveric Study,” Scoliosis Research Society 44th Annual Meeting, San Antonio, TX, 2009.

Schwartz DM, Sestokas AK, Bhalodia VM, Flynn JM, Shah SA, Gabos PG, Bowe JA, Dormans JP. “Is the Intraoperative H-Reflex a Viable Substitute for Transcranial Electric Motor Evoked Potential (tceMEP) Monitoring in Detecting Emerging Spinal Cord Injury during Scoliosis Surgery?” Scoliosis Research Society 44th Annual Meeting, San Antonio, TX, 2009.

Marks MC, Newton PO, Betz RR, Sponseller PD, Lonner BS, Shah SA, Shufflebarger HL, Harms Study Group. “Surgical Site Infection (SSI) in Spinal Surgery: The Newest “Never” Event,” Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, 2010.

Yaszay B, Newton PO, Shufflebarger HL, Shah SA, Bastrom T, Harms Study Group. “A New Indication for Ponte Releases in Adolescent Idiopathic Scoliosis: Restoring Thoracic Kyphosis,” Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, 2010.

Shah SA, Yorgova P, Ali MHM, Rogers KJ. “Beta Tricalcium Phosphate as a Bone Graft Substitute for the Posterior Treatment of Adolescent Idiopathic Scoliosis: Results of a Prospective Clinical Study,” Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, 2010.

Auerbach JD, Lonner BS, Crerand CE, Dean LE, Shah SA, Flynn JM, Bastrom T, Bowe WP, Newton PO. “Body Image in Idiopathic Scoliosis: Validation of the Body Image Disturbance Questionnaire,” Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, 2010.

SCIENTIFIC PRESENTATIONS: *(continued)*

Lonner BS, Kean KE, Sponseller PD, Shufflebarger HL, Shah SA, Crawford AH, O'Brien MF, Betz RR, Newton PO. "Sheuermann Kyphosis: Clinical Presentation and Impact on Quality of Life," Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, 2010.

Marks MC, Newton PO, Petcharaporn M, Bastrom T, Shah SA, Lonner BS, Miyanji F. "Unfused Segmental Motion Increases with a More Distal Fusion: A Set-up for Disc Degeneration?" Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa, HI, 2010.

Shah SA, Garrido E, Farooq N, Tucker SK, Noordeen MH. "In vivo Distraction Force and Length Measurements of Growing Rods: Which Factors Influence the Ability to Lengthen?" Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa, HI, 2010.

Yilmaz G, Rogers KJ, Shah SA. "Surgical Treatment of Scoliosis in Osteogenesis Imperfecta Patients with Cement Augmented Pedicle Screw Instrumentation," Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa, HI, 2010.

Shah SA, Newton PO, Lonner BS, Betz RR, Bastrom T, Marks MC, Harms Study Group. "Longer Surgical Times May Increase Your Complication Rate," Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa, HI, 2010.

Shah SA, Newton PO, Lonner BS, Shufflebarger HL, Bastrom T, Marks MC, Harms Study Group. "Rod Strength: Is it an Important Factor in Coronal and Sagittal Realignment in Adolescent Idiopathic Scoliosis?" 17th International Meeting on Advanced Spine Techniques, Toronto, Canada, 2010.

Shah SA, Sucato DS, Newton PO, Shufflebarger HL, Emans JB, Sponseller PD, Neiss G, Yorgova P, Lenke LG. "Perioperative Neurologic Events from a Multicenter Consecutive Series of Pediatric Vertebral Column Resection: Nature, Frequency and Outcomes," 17th International Meeting on Advanced Spine Techniques, Toronto, Canada, 2010.

Sponseller PD, Newton PO, Jain A, Shah SA, Emans JB, Lenke LG, Sucato DS, Shufflebarger HL, Blanke K. "Vertebral Column Resection in Children with Neuromuscular Spine Deformity," 17th International Meeting on Advanced Spine Techniques, Toronto, Canada, 2010.

Trobisch P, Bharucha N, Newton PO, Shah SA, Samdani AF, Betz RR, Lonner BS. "Race and Adolescent Idiopathic Scoliosis: Are There Racial Differences in Deformity Characteristics and Clinical Severity Preoperatively?" 17th International Meeting on Advanced Spine Techniques, Toronto, Canada, 2010.

Lonner BS, Penn P, Yaszay B, Shah SA, Sponseller PD, Shufflebarger HL, Samdani AF, Newton PO, Betz RR. "Early and One Year Complication and Re-Operation Rates in Scheuermann's Kyphosis: A Comparative Analysis to Operative Adolescent Idiopathic Scoliosis," 17th International Meeting on Advanced Spine Techniques, Toronto, Canada, 2010.

Ravi K, Nunn T, Ono T, Varley E, Glaser DA, Yorgova P, Shah SA, Newton PO. "Ideal Rod Contouring for Maintaining Sagittal Alignment in AIS: How Much to Overbend?" 17th International Meeting on Advanced Spine Techniques, Toronto, Canada, 2010.

Shah SA, Garras DN, Lonner BS, Bastrom T, Marks MC, Harms Study Group. "Does Obesity Affect Coronal Deformity and Sagittal Alignment in Adolescent Idiopathic Scoliosis?" 17th International Meeting on Advanced Spine Techniques, Toronto, Canada, 2010.

Shah SA, Yilmaz G, Rogers KJ. "Surgical Treatment of Scoliosis in Osteogenesis Imperfecta Patients with Cement Augmented Pedicle Screw Instrumentation," 17th International Meeting on Advanced Spine Techniques, Toronto, Canada, 2010.

SCIENTIFIC PRESENTATIONS: *(continued)*

Miyanji F, Varghese R, Newton PO, Samdani AF, Shah SA, Reilly CW, Mulpuri K. “Impact of Surgical Waitlists on Scoliosis Surgery: The Surgeon’s Perspective,” 17th International Meeting on Advanced Spine Techniques, Toronto, Canada, 2010.

Oda JE, Shah SA, Mackenzie WG, Yazici M, Akbarnia BA, Growing Spine Study Group. “Concurrent Tethered Cord Release and Growing Rod Implantation: Is it Safe?” 17th International Meeting on Advanced Spine Techniques, Toronto, Canada, 2010.

Ahn J, Penn P, Bharucha N, Auerbach JD, Shah SA, Lonner BS. “Body Image Disturbance Questionnaire – Scoliosis Version: Discriminant Validity in AIS,” 45th Annual Meeting of the Scoliosis Research Society, Kyoto, Japan, 2010.

Sponseller PD, Newton PO, Lonner BS, Shah SA, Shufflebarger HL, Betz RR, Marks MC, Bastron T. “Does PSF with Pedicle Screws Control Idiopathic Scoliosis with Open Triradiate Cartilage?” 45th Annual Meeting of the Scoliosis Research Society, Kyoto, Japan, 2010.

Newton PO, Lenke LG, Shufflebarger HL, Sucato DS, Emans JB, Sponseller PD, Shah SA, Bastrom T. “Perioperative Complications of Pediatric Vertebral Column Resections,” 45th Annual Meeting of the Scoliosis Research Society, Kyoto, Japan, 2010.

Yaszay B, Schulte C, Marks MC, Newton PO, Betz RR, Shah SA, Lonner BS, Shufflebarger HL, Flynn JM, Harms Study Group. “A Comparison of Perioperative and Delayed Major Complications Following 1,630 AIS Procedures,” 45th Annual Meeting of the Scoliosis Research Society, Kyoto, Japan, 2010.

Lenke LG, Newton PO, Sucato DS, Shufflebarger HL, Emans JB, Sponseller PD, Shah SA, Sides B, Blanke K. “Multicenter Analysis of 147 Consecutive Vertebral Column Resections for Severe Pediatric Spinal Deformity,” 45th Annual Meeting of the Scoliosis Research Society, Kyoto, Japan, 2010.

Sucato DS, Shah SA, Lenke LG, Newton PO, Shufflebarger HL, Emans JB, Sponseller PD. “Prompt Response to Critical Spinal Cord Monitoring Changes During Vertebral Column Resection Results in a Low Incidence of Permanent Neurologic Deficit,” 45th Annual Meeting of the Scoliosis Research Society, Kyoto, Japan, 2010.

Newton PO, Bastrom T, Emans JB, Shah SA, Shufflebarger HL, Sponseller PD, Sucato DJ, Lenke LG. “Antifibrinolytic Agents Substantially Reduce Blood Loss During Vertebral Column Resection Procedures,” 45th Annual Meeting of the Scoliosis Research Society, Kyoto, Japan, 2010.

Shah SA, Sucato DS, Newton PO, Shufflebarger HL, Emans JB, Sponseller PD, Neiss G, Yorgova P, Lenke LG. “Perioperative Neurologic Events from a Multicenter Consecutive Series of Pediatric Vertebral Column Resection: Nature, Frequency and Outcomes,” Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA, 2011.

Newton PO, Bastrom T, Emans JB, Shah SA, Shufflebarger HL, Sponseller PD, Sucato DJ, Lenke LG. “Antifibrinolytic Agents Substantially Reduce Blood Loss During Vertebral Column Resection Procedures,” Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA, 2011.

Yaszay B, Schulte C, Marks MC, Newton PO, Betz RR, Shah SA, Lonner BS, Shufflebarger HL, Flynn JM, Harms Study Group. “A Comparison of Perioperative and Delayed Major Complications Following 1,630 AIS Procedures,” Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA, 2011.

Shah SA, Wiggins CR, Schwartz DM, Sestokas AK, Rogers KJ, Gabos PG, Dabney KW, Miller F. “Spinal Cord Monitoring During Scoliosis Surgery in Children with Spastic Cerebral Palsy: Is It Feasible and Safe Even with an Active Seizure Disorder?” Pediatric Orthopaedic Society of North America Annual Meeting, Montreal, Canada, 2011.

SCIENTIFIC PRESENTATIONS: *(continued)*

Shah SA, “Better Patient-Based Outcomes in Adolescent Idiopathic Scoliosis with All Pedicle Screw Constructs,” Pediatric Orthopaedic Society of North America Annual Meeting, Montreal, Canada, 2011.

Sponseller PD, Gjolaj JP, Narayanan UG, Shah SA, Newton PO, Samdani AF, Bastrom T, Marks MC. “Differences Between Patients with Cerebral Palsy whose Curves are Treated Operatively vs. Non-operatively,” 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Shah SA, Yorgova P, Neiss GI, Gabos PG, Bowen JR. “Preliminary Experience with Clinical Use of a DNA Prognostic Test for Adolescent Idiopathic Scoliosis in 196 Patients,” 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Mehta JS, Min K, Karaikovic E, Shah SA, Zarzycki D, Gaines RW. “Short Segment Anterior Fusion with Interbody Cages for Painful Scheuermann’s Disease,” 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Lonner BS, Teran JS, Newton PO, Bastrom T, Shah SA, Betz RR, Sponseller PD, Samdani AF, Shufflebarger HL. “Is Preoperative PFT Assessment Worthwhile in Scheuermann’s Kyphosis?” 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Yaszay B, Kabirian N, Pawelek J, Emans JB, Johnston CE, Shah SA, Mundis GM, Akbarnia BA, Growing Spine Study Group. “Beware the Risks of Instrumenting to the Pelvis in Ambulatory Early Onset Scoliosis Patients Treated with Growth Sparing Surgery,” 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Sponseller PD, Gjolaj JP, Shah SA, Samdani AF, Newton PO, Cahill PJ, Narayanan UG, Ashgar J, Bastrom T, Marks MC. “Radiographic Classification of Cerebral Palsy,” 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Shah SA, Seme SJ, Otte JF, Freeman AL, Camisa WJ, Akbarnia BA, Carl AL. “The Next Generation of Scoliosis Treatment: Apical Control with Motion Preservation,” 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Lonner BS, Cahill PJ, Teran JS, Newton PO, Bastrom T, Shah SA, Sponseller PD, Shufflebarger HL. “Sagittal Spino-Pelvic Parameters in Scheuermann’s Kyphosis,” 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Sponseller PD, Gjolaj JP, Newton PO, Shah SA, Marks MC, Bastrom T, Neubauer P. “Differences Between Patients who Choose Operative vs. Nonoperative Management of AIS,” 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Miyajima F, Marks MC, Mulpuri K, Samdani AF, Shah SA, Shufflebarger HL, Betz RR, Newton PO. “Baseline Data Variability in Prospective Multi-Center Databases: How Comparable is the Data Between Centers?” 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Marks MC, Bastrom T, Petcharaporn M, Betz RR, Shufflebarger HL, Lonner BS, Shah SA, Newton PO. “Post-Operative Trunk Mobility is Better with the Anterior Approach vs. Posterior in Thoracolumbar Scoliosis,” 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Marks MC, Bastrom T, Petcharaporn M, Betz RR, Shufflebarger HL, Lonner BS, Shah SA, Newton PO. “Trunk Motion Improves Over Time after Spinal Fusion for Adolescent Idiopathic Scoliosis,” 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

SCIENTIFIC PRESENTATIONS: *(continued)*

Samdani AF, Garg H, Cahill PJ, Marks MC, Bastrom T, Lonner BS, Shah SA, Miyanji F, Shufflebarger HL, Newton PO, Betz RR. "Treatment of Adolescent Idiopathic Scoliosis with All Pedicle Screw Constructs with Minimum Five Year Follow Up," 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Lonner BS, Yaszay B, Terran JS, Newton PO, Shah SA, Sponseller PD, Samdani AF, Betz RR, Shufflebarger HL. "Early and One Year Complication Rates in Scheuermann's Kyphosis: Are the Surgical Challenges Different from Adolescent Idiopathic Scoliosis?" 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Shah SA, Dhawale AA, Reichard S, Holmes L, Brislin R, Rogers KJ, Mackenzie WG. "Casting for Early Onset Scoliosis: The Pitfall of Increased Peak Inspiratory Pressure," Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

Yaszay B, Kabirian N, Pawelek J, Emans JB, Johnston CE, Shah SA, Mundis GM, Akbarnia BA, Growing Spine Study Group. "Beware the Risks of Instrumenting to the Pelvis in Ambulatory Early Onset Scoliosis Patients Treated with Growth Sparing Surgery," Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

Shah SA, Winters B, Curry EP, Yorgova P, Neiss G, Hilibrand AS, Harms Study Group. "Cervical Sagittal Contour Decomensation Before and After Posterior Surgery for Adolescent Idiopathic Scoliosis," Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

Cahill PJ, Samdani AF, Pahys JM, Gresh M, Yaszay B, Marks MC, Bastrom T, Lonner BS, Shah SA, Shufflebarger HL, Newton PO, Betz RR. "Youth and Experience: The Effect of Surgeon Experience on Outcomes in AIS Surgery," Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

Shah SA, Wiggins CR, Schwartz DM, Sestokas AK, Rogers KJ, Gabos PG, Dabney KW, Miller F. "Spinal Cord Monitoring During Scoliosis Surgery in Children with Spastic Cerebral Palsy: Is It Feasible and Safe Even with an Active Seizure Disorder?" Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

Lonner BS, Teran JS, Newton PO, Shah SA, Betz RR, Sponseller PD, Samdani AF, Shufflebarger HL. "MRI Screening in Operative Scheuermann's Kyphosis: Is it Necessary?" Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

Lonner BS, Newton PO, Teran JS, Betz RR, Sponseller PD, Shah SA, Samdani AF, Shufflebarger HL. "Scheuermann's Kyphosis: Impact on Quality of Life in 86 Patients," Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

Gjolaj J, Sponseller PD, Shah SA, Newton PO, Marks MC, Bastrom T, Flynn JM, Lonner BS, Samdani AF. "Spinal Deformity in Marfan vs. AIS: Learning from the Differences," Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

Samdani AF, Garg H, Cahill PJ, Marks MC, Bastrom T, Clements DH, Shah SA, Shufflebarger HL, Betz RR, Newton PO. "Five Year Results for Lenke 1 or 2 Curves: Comparison of Anterior, Posterior Hybrid and Posterior All Pedicle Screws," Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

Shah SA, Dhawale AA, Sponseller PD, Bastrom T, Neiss GI, Yorgova P, Newton PO, Yaszay B, Shufflebarger HL, Gabos PG, Dabney KW, Miller F, Harms Study Group. "The Use of Antifibrinolytics Substantially Reduces Blood Loss During Surgery for Cerebral Palsy Scoliosis," Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

Marks MC, Bastrom T, Petcharaporn M, Betz RR, Shufflebarger HL, Lonner BS, Shah SA, Newton PO. "Post-Operative Trunk Mobility is Better with the Anterior Approach vs. Posterior in Thoracolumbar Scoliosis," Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

SCIENTIFIC PRESENTATIONS: *(continued)*

Marks MC, Bastrom T, Petcharaporn M, Betz RR, Shufflebarger HL, Lonner BS, Shah SA, Newton PO. “Trunk Motion Improves Over Time after Spinal Fusion for Adolescent Idiopathic Scoliosis,” Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

Lonner BS, Teran JS, Newton PO, Bastrom T, Shah SA, Betz RR, Samdani AF, Shufflebarger HL, Sponseller PD. “Is Preoperative PFT Assessment Worthwhile in Scheuermann’s Kyphosis?” Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

Shah SA, Yorgova P, Neiss GI, Gabos PG, Bowen JR. “Preliminary Experience with Clinical Use of a DNA Prognostic Test for Adolescent Idiopathic Scoliosis in 196 Patients,” Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

Dhawale AA, Shah SA, Reichard S, Holmes L, Brislin R, Rogers KJ, Mackenzie WG. “Casting for Early Onset Scoliosis: The Pitfall of Increased Peak Inspiratory Pressure,” 5th International Congress on Early Onset Scoliosis and Growing Spine, Orlando, FL, 2011.

Akbarnia BA, Kabirian N, Pawelek JB, Zhang D, Redding GJ, Emans JB, Shah SA, Johnston CE, Growing Spine Study Group. “Is There a Significant Increase in Thoracic Height after Growing Rod Surgery for Early Onset Scoliosis?” 5th International Congress on Early Onset Scoliosis and Growing Spine, Orlando, FL, 2011.

Yaszay B, Kabirian N, Pawelek JB, Emans JB, Johnston CE, Shah SA, Mundis GM, Akbarnia BA, Growing Spine Study Group. “How Risky is Instrumenting to the Pelvis in Ambulatory Early Onset Scoliosis Treated with Growth Sparing Surgery?” 5th International Congress on Early Onset Scoliosis and Growing Spine, Orlando, FL, 2011.

Myung K, Lee C, Wall E, Jain V, Shah SA, Johnston CE, Akbarnia BA, Skaggs DL, Growing Spine Study Group. “Hemoglobin Levels in Patients with Early Onset Scoliosis Treated with Growing Rods,” 5th International Congress on Early Onset Scoliosis and Growing Spine, Orlando, FL, 2011.

Shah SA, Yorgova P, Neiss GI, Gabos PG, Bowen JR. “Preliminary Experience with Clinical Use of a DNA Prognostic Test for Adolescent Idiopathic Scoliosis,” Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco, CA 2012.

Shah SA, Dhawale AA, Sponseller PD, Bastrom T, Neiss GI, Yorgova P, Newton PO, Yaszay B, Shufflebarger HL, Gabos PG. “The Use of Antifibrinolytics Substantially Reduces Blood Loss During Surgery for Cerebral Palsy Scoliosis,” Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco, CA 2012.

Shah SA, Winters B, Curry EP, Yorgova P, Neiss G, Hilibrand AS. “Cervical Sagittal Contour Decompenation Before and After Posterior Surgery for Adolescent Idiopathic Scoliosis,” Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco, CA 2012.

Dhawale AA, Shah SA, Yorgova P, Neiss GI, Layer D, Rogers KJ, Gabos PG, Holmes L. “Effectiveness of Cross-linking Posterior Segmental Instrumentation in Adolescent Idiopathic Scoliosis,” Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco, CA 2012.

Lonner BS, Newton PO, Teran JS, Betz RR, Sponseller PD, Shah SA, Samdani AF, Shufflebarger HL. “Scheuermann’s Kyphosis: Impact on Quality of Life in 86 Patients,” Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco, CA 2012.

Shah SA, Winters B, Curry EP, Yorgova P, Neiss G, Hilibrand AS. “Cervical Sagittal Contour Decompenation Before and After Posterior Surgery for Adolescent Idiopathic Scoliosis,” Pediatric Orthopaedic Society of North America Annual Meeting, Denver, CO, 2012.

SCIENTIFIC PRESENTATIONS: *(continued)*

Shah SA, VandenBerg C, Gabos PG, J. Richard Bowen, Choudhry D, Sacks K, Rogers KJ. “Perioperative Use of Gabapentin Improves Outcomes in Pain Management after Posterior Spinal Fusion Surgery for Adolescent Idiopathic Scoliosis,” Pediatric Orthopaedic Society of North America Annual Meeting, Denver, CO, 2012.

McElroy M, Sponseller PD, Dattila J, Thompson GH, Akbarnia BA, Shah SA, Snyder BD, Growing Spine Study Group. “A Critical Assessment of Growing Rods for the Treatment of Pediatric Scoliosis in Cerebral Palsy,” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

Karatas AF, Atanda A, Holmes L, Rogers KJ, Gabos PG, Shah SA. Comparison of Direct Pars Repair Techniques of Spondylolysis: Pedicle Screw-Rod-Hook vs. Laminar Pars Compression Screw,” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

Kadhim M, Shah SA, Lonner BS, Shufflebarger HL, Sponseller PD, Newton PO, Harms Study Group. “Guidelines for Choosing the Lower Instrumented Vertebra in Scheuermann’s Kyphosis: Revisited,” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

Cahill PJ, Lonner BS, Newton PO, Shah SA, Samdani AF, Sponseller PD, Shufflebarger HL, Harms Study Group. “Sagittal Spinopelvic Parameters in Scheuermann’s Kyphosis: a Preliminary Study,” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

Shah SA, Yorgova P, Neiss GI, Gabos PG, Bowen JR. “Preliminary Experience with Clinical Use of a DNA Prognostic Test for Adolescent Idiopathic Scoliosis in 234 Patients,” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

Larson AN, Aubin CE, Polly DW, Ledonio CGT, Lonner BS, Shah SA, Sucato DJ, Lenke LG, Richards BS, Erickson MA, Emans JB, Weinstein SL. “Are More Screws Better? A Systematic Review of the Implant Density and Curve Correction in AIS,” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

Hwang SW, Samdani AF, Marks MC, Bastrom T, Garg H, Lonner BS, Pahys JM, Shah SA, Miyanji F, Shufflebarger HL, Newton PO, Betz RR. “Outcomes of Adolescent Idiopathic Scoliosis Using Pedicle Screw Constructs with Minimum Five Year Follow Up,” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

Shah SA, Bastrom T, Lonner BS, Yaszay B, Newton PO, Harms Study Group. “Do Pedicle Screws Really Save a Level in AIS? An Analysis of the Contemporary Surgical Treatment of Lenke 1 Curves and the Trend to Fuse More Proximal Levels,” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

Shah SA, Dhawale AA, Oda JE, Yorgova P, Neiss GI, Holmes L, Gabos PG. “The Ponte Osteotomy Improves Coronal and Sagittal Plane Correction in Thoracic Adolescent Idiopathic Scoliosis,” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

Lonner BS, Toombs C, Shah SA, Bastrom T, Penn P, Bright K, Stern CS, Roy-Beaudry M, Beausejour M, Parent S. “Validation of TAASQ, the Truncal Anterior Asymmetry Scoliosis Questionnaire,” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

Lonner BS, Toombs C, Shah SA, Shufflebarger HL, Flynn JM, Newton PO. “Resource Utilization in AIS Surgery: Is there Opportunity for Cost-Savings?” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

Shah SA, Marks MC, Petcharaporn M, Lonner BS, Newton PO, Harms Study Group. “Towards Quality and Safety in Spinal Deformity Surgery: Use of a Multicenter Database Registry for Quality Improvement,” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

SCIENTIFIC PRESENTATIONS: *(continued)*

Pourtaheri S, Miller F, Dabney KW, Shah SA, Dubowy S, Holmes L. “Assessment of Deep Wound Infections Following Pediatric Scoliosis Surgery,” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

Akbarnia BA, Kabirian N, Pawelek J, Zhang D, Redding G, Emans JB, Shah SA, Johnston CE, Growing Spine Study Group. “Is there a Significant Increase in Thoracic Height after Growing Rod Surgery for Early Onset Scoliosis?” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

Dhawale AA, Shah SA, Yorgova P, Neiss GI, Layer D, Rogers KJ, Gabos PG, Holmes L. “Cross-linking Posterior Segmental Instrumentation in Adolescent Idiopathic Scoliosis Has No Demonstrable Clinical or Radiographic Effect,” 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, 2012.

Marks MC, Bastrom T, Petcharaporn M, Shah SA, Samdani AF, Lonner BS, Miyanji F, Newton PO. “Motion of the Unfused Lumbar Segments Remains Increased up to Six Years after Fusion for AIS,” Scoliosis Research Society 47th Annual Meeting and Course, Chicago, IL, 2012.

Shah SA, Karatas AF, Dhawale AA, Dede O, Holmes L, Yorgova P, Neiss GI, Mundis GM, Pawelek J, Akbarnia BA, Growing Spine Study Group. “What is the Effect of Serial Growing Rod Lengthening on the Sagittal Profile and Pelvic Parameters in Early Onset Scoliosis?” Scoliosis Research Society 47th Annual Meeting and Course, Chicago, IL, 2012.

Samdani AF, Belin EJ, Miyanji F, Pahys JM, Shah SA, Newton PO, Betz RR, Sponseller PD. “Major Perioperative Complications after Surgery for Cerebral Palsy: Assessment of Risk Factors,” Scoliosis Research Society 47th Annual Meeting and Course, Chicago, IL, 2012.

Larson AN, Polly DW, Ackerman SJ, Ledonio CGT, Lonner BS, Shah SA, Sponseller PD, Emans JB, Richards BS. “What Would be the Annual Cost Savings if Fewer Screws Were Used in the Treatment of AIS in the US?” Scoliosis Research Society 47th Annual Meeting and Course, Chicago, IL, 2012.

Parent S, Roy-Beaudry M, Roussi J, Mac-Thiong JM, Aubin CE, Newton PO, Shah SA, Labelle H. “Surgical Correction of Lenke 1A Curves: What Changes are Taking Place in 3D?” Scoliosis Research Society 47th Annual Meeting and Course, Chicago, IL, 2012.

Shah SA, VandenBerg C, Gabos PG, J. Richard Bowen, Choudhry D, Sacks K, Rogers KJ. “Perioperative Use of Gabapentin Improves Outcomes in Pain Management after Posterior Spinal Fusion Surgery for Adolescent Idiopathic Scoliosis,” Scoliosis Research Society 47th Annual Meeting and Course, Chicago, IL, 2012.

Sponseller PD, Shah SA, Samdani AF, Yazsaz B, Newton PO, Thaxton LM, Bastrom T, Marks MC. “Wound Infection after Spine Deformity Correction in Cerebral Palsy: Risk Factors,” Scoliosis Research Society 47th Annual Meeting and Course, Chicago, IL, 2012.

Miyanji F, Samdani AF, Strum P, Shah SA, Sponseller PD, Newton PO. “Hip Subluxation, Pelvic Obliquity and Scoliosis in the CP Population: A Random Triad or Predictable Relationship?” Scoliosis Research Society 47th Annual Meeting and Course, Chicago, IL, 2012.

Lonner BS, Toombs C, Shah SA, Shufflebarger HL, Flynn JM, Newton PO. “Resource Utilization in AIS Surgery: Is there Opportunity for Cost-Savings?” Scoliosis Research Society 47th Annual Meeting and Course, Chicago, IL, 2012.

Larson AN, Aubin CE, Polly DW, Ledonio CG, Lonner B, Shah SA, Sucato, DJ, Lenke LG, Erickson MA, “Are More Screws Better?” A Systematic Review of the Implant Density and Curve Correction in AIS. AAOS Annual Meeting, Chicago, IL March 2013

Poutaheri S, Shah SA, Mackenzie WG, Holmes L, “Haolo-Gravity Traction in Skeletal Dysplasia Patients with Severe Kyphoscoliosis: Outcomes and Complications, AAOS Annual Meeting, Chicago, IL March 2013

SCIENTIFIC PRESENTATIONS: *(continued)*

Akbarnia BA, Kabirian N, Pawelek J, Zhang D, Redding G, Emans JB, Shah SA, Johnston II CE, “Is There a Significant Increase in Thoracic Height after Growing Rod Surgery for Early Onset Scoliosis?” AAOS Annual Meeting, Chicago, IL March 2013

Marks M, Bastrom T, Petcharaporn M, Shah SA, Samdani A, Lonner B, Miyanji F, Newton PO, “Motion of the Unfused Lumbar Segments Remains Increased Up to Six Years Fusion for AIS” AAOS Annual Meeting, Chicago, IL March 2013

VandenBerg CD, Shah SA, Gabos PG, Bowen JR, Choudhry DK, Sacks K, Rogers KJ, Perioperative “Use of Gabapentin in Idiopathic Scoliosis Improves Pain Management after Posterior Spinal Fusion” AAOS Annual Meeting, Chicago, IL March 2013

Shah SA, “Posterior Releases and Ponte Osteotomy for Spinal Deformity Correction” AAOS Annual Meeting, Chicago, IL March 2013

Shah SA, Marks M, Petcharaporn M, Lonner B, Newtown PO, “Towards Quality and Safety in Spinal Surgery: Use of a Multicenter Database Registry for Quality Improvement” AAOS Annual Meeting, Chicago, IL March 2013

Shah SA, Karatas AF, Dhawale A, Dede O, Holmes L, Yorgova P, Neiss G, Mundis GM, Pawelek J, “What is the Effect of Growing Rod Lengthening on the Sagittal Profile and Pelvic Parameters in Early Onset Scoliosis?” AAOS Annual Meeting, Chicago, IL March 2013

Shah SA, Stephen Lawless, MD MBA, William G. Mackenzie, MD, Comprehensive Program Aligning Structure, Processes And The Electronic Medical Record Improves Quality And Safety Of Complex Spinal Deformity Surgery In Children, POSNA Annual Meeting/Conference, Toronto, Canada, May 2013

Firoz Miyanji, MD, Amer Samdani, Peter F. Sturm, MD, Shah SA, Paul D. Sponseller, MD, Peter O. Newton, MD Hip Subluxation, Pelvic Obliquity, And Scoliosis In The CP Population: A Random Triad Or A Predictable Relationship? POSNA Annual Meeting/Conference, Toronto, Canada, May 2013

Shah SA, Sina Pourtaheri, MD, Freeman Miller, MD, Kirk W Dabney, MD, Susan Dubowsky, PA-C, Laurens Holmes, PhD, Assessment For Deep Wound Infections Following Pediatric Scoliosis Surgery, POSNA Annual Meeting/Conference, Toronto, Canada, May 2013

Shah SA, Segmental, POSNA Annual Meeting/Conference, Toronto, Canada, May 2013

Firoz Miyanji, MD William G. Mckenzie, John B. Emans, MD, John P. Dormans, Shah SA, Pediatric Cervical Spine: My Approach To The Down Syndrome Patient, My Approach To OS Odontoideum Case Presentations/Panel Discussion , POSNA Annual Meeting/Conference, Toronto, Canada, May 2013

Firoz Miyanji, MD, FRCS(C); Tracey Bastrom, MA; Amer F. Samdani, MD; Burt Yaszay, MD; David H. Clements, MD; Shah SA; Michelle C. Marks, PT, MA; Randal R. Betz, MD; Harry L. Shufflebarger, MD; Peter O. Newton, MD, The Impact of Prolonged Surgical Wait Times on AIS: What Complications Can be Expected? Scoliosis Research Society 48th Annual Meeting & Course, Lyon, France September 2013

Michelle C. Marks, PT, MA; Tracey Bastrom, MA; Maty Petcharaporn, BS; Shah SA; Amer F. Samdani, MD; Randal R. Betz, MD; Baron S. Lonner; Firoz Miyanji, MD, FRCS(C); Peter O. Newton, MD, The Effect of Time and Fusion Length on Motion of the Un-Fused Lumbar Segments in Adolescent Idiopathic Scoliosis Scoliosis Research Society 48th Annual Meeting & Course, Lyon, France September 2013

Baron S. Lonner, MD; Courtney Toombs, BS; Shah SA; Tracey Bastrom, MA; Phedra Penn, MS; Kristin Bright, PhD; Carrie Scharf Stern, MD; Marjolaine Roy- Beaudry, MSc; Marie Beausejour; Stefan Parent, MD, PhD

SCIENTIFIC PRESENTATIONS: *(continued)*

What an AIS Patient Sees in the Mirror: Validation of the Truncal Anterior Asymmetry Scoliosis Questionnaire (TAASQ) Scoliosis Research Society 48th Annual Meeting & Course, Lyon, France September 2013

Wai Weng Yoon, BSc(Hons), MBBS, MRCS, FRCS(Tr&Orth); Fady S. Sedra, MBBCh, MSc, MRCS; Nanjundappa S. Harshavardhana, MD, MS(Orth), Dip. SICOT; Shah SA; Francesco Muntoni, MD, FRCPC, FMed Sci; Colin Wallis, MBChB, FRCPC, MRCP, MD, DCH, FCP(SA); Hilali H. Noordeen, FRCS, Magnetic Growth Rods Improve Pulmonary Function in Children with Early Onset Scoliosis, Scoliosis Research Society 48th Annual Meeting & Course, Lyon, France September 2013

Tom P. Schlösser, MD; Shah SA; Samantha J. Reichard; Kenneth J. Rogers, PhD; Koen L. Vincken, PhD; Rene M. Castelein, MD, PhD, Variations in Sagittal Spino-Pelvic Alignment Between Different Curve Patterns of Adolescent Idiopathic Scoliosis: Is the Evolution of Thoracic Scoliosis Different Than Lumbar? Scoliosis Research Society 48th Annual Meeting & Course, Lyon, France September 2013

Benjamin D. Roye, MD, MPH; Margaret L. Wright, BS; Hiroko Matsumoto, MA; Petya Yorgova, MS; Geraldine I. Neiss, PhD; Daren J. McCalla, BS; Joshua E. Hyman, MD; David P. Roye, MD; Shah SA; Michael G. Vitale, MD, An Independent Evaluation of the Validity of a DNA-Based Prognostic Test for Adolescent Idiopathic Scoliosis MPH ** This presentation is the result of a project funded, in part, by an SRS Research Grant**, Scoliosis Research Society 48th Annual Meeting & Course, Lyon, France September 2013

Prakash Sitoula, MD; Kushagra Verma, MD, MS; James O. Sanders, MD; Petya Yorgova, MS; Geraldine I. Neiss, PhD; Kenneth J. Rogers, PhD; Laurens Holmes, PhD, DrPH; Peter G. Gabos, MD; Shah SA, The Simplified Skeletal Maturity Method and its Correlation with Curve Progression in Idiopathic Scoliosis Scoliosis Research Society 48th Annual Meeting & Course, Lyon, France September 2013

Paul D. Sponseller, MD; Shah SA; Burt Yaszay, MD; Peter O. Newton, MD; Mark F. Abel, MD; Tracey Bastrom, MA; Michelle C. Marks, PT, MA; Patrick J. Cahill, MD, Proximal Junctional Kyphosis in Cerebral Palsy: Risk Factors and Guidelines Scoliosis Research Society 48th Annual Meeting & Course, Lyon, France September 2013

Shah SA; Paul D. Sponseller, MD; Mark F. Abel, MD; Peter O. Newton, MD; Burt Yaszay, MD; Firoz Miyanji, MD, FRCS(C); Amer F. Samdani, MD; Harms Study Group A Prospective Multi-Center Study of Neuromonitoring for Cerebral Palsy Scoliosis: The Nature and Rate of Alerts and Recovery of Changes, Scoliosis Research Society 48th Annual Meeting & Course, Lyon, France September 2013

Baron S. Lonner, MD; Courtney Toombs, BS; Shah SA; Amer F. Samdani, MD; *Peter O. Newton, MD*, Pulmonary Function Changes Maintained Following Surgery for Scheuermann's Kyphosis Scoliosis Research Society 48th Annual Meeting & Course, Lyon, France September 2013

Scoliosis Baron S. Lonner, MD; Courtney Toombs, BS; Shah SA; Amer F. Samdani, MD; Patrick J. Cahill, MD; Harry L. Shufflebarger, MD; Burt Yaszay, MD; Paul D. Sponseller, MD; Peter O. Newton, MD, Quality of Life Improvement Following Surgery for Scheuermann's Kyphosis Compared to Adolescent Idiopathic Scoliosis Research Society 48th Annual Meeting & Course, Lyon, France September 2013

Kadhim, MD; William G. Mackenzie, MD; Ellen Spurrier; Deepika Thacker; Christian Pizarro, MD; Shah SA, Scoliosis Surgery in Children with Congenital Heart Disease Muayad Scoliosis Research Society 48th Annual Meeting & Course, Lyon, France September 2013

INVITED LECTURESHIPS / COURSE FACULTY:

“Supracondylar Fractures of the Humerus in Children,” Thomas Jefferson University Department of Orthopaedic Surgery Grand Rounds, Philadelphia, PA, 1998.

“Developmental Dysplasia of the Hip,” Thomas Jefferson University Department of Orthopaedic Surgery Grand Rounds, Philadelphia, PA, 1998.

“Developmental Dysplasia of the Hip: Current Concepts,” Jefferson Medical College Alumni Reunion Class Clinics, Philadelphia, PA, 1999.

“Knee Injuries in the Pediatric and Adolescent Athlete,” Thomas Jefferson University Department of Orthopaedic Surgery Grand Rounds, Philadelphia, PA, 2000.

“Knee Injuries in the Pediatric and Adolescent Athlete,” Kent General Hospital, Department of Pediatrics Continuing Education, Dover, DE, 2000.

“Sports Injuries in Children,” Riddle Memorial Hospital, Department of Pediatrics Continuing Education, Springfield, PA, 2001.

“Cervical Spine Disorders in Children,” Thomas Jefferson University Department of Orthopaedic Surgery Grand Rounds, Philadelphia, PA, 2001.

“Pain Management in Orthopaedic Surgery,” duPont Hospital for Children, Department of Therapeutic Services, Wilmington, DE, 2001.

“Knee Injuries in the Pediatric and Adolescent Athlete,” Bethesda Naval Hospital, Department of Orthopaedics Visiting Professor, Bethesda, MD, 2001.

“Cervical Spine Disorders in Children,” Bethesda Naval Hospital, Department of Orthopaedics Visiting Professor, Bethesda, MD, 2001.

“Sports Injuries in Children,” Voorhees Pediatric Rehabilitation Hospital, Department of Pediatrics Continuing Education, Voorhees, NJ, 2001.

“Long Bone and Pelvic Fractures in Children,” 4th Annual Trauma Symposium, Atlantic City Medical Center, Atlantic City, NJ, 2002.

“Developmental Dysplasia of the Hip: Current Concepts,” Guest Lecturer, University of Medicine and Dentistry of New Jersey, Stratford, NJ, 2002.

“Contemporary Strategies for Treatment of Pediatric Elbow Fractures,” Guest Lecturer, University of Medicine and Dentistry of New Jersey, Stratford, NJ, 2002.

“Pediatric Sports Medicine Injuries,” Delaware Athletic Trainers Conference, Wilmington, DE, 2002.

“Sports Injuries in Children,” Virtua Health System, Department of Pediatrics Continuing Education, Voorhees, NJ, 2002.

“The Monarch™ Spinal System for the Treatment of Pediatric and Adolescent Spinal Deformity,” 15th Isola Study Group, Sacramento, CA, 2003.

“The Monarch™ Spinal System for the Treatment of Pediatric and Adolescent Spinal Deformity: Further Insights,” 16th Isola Study Group, Boston, MA, 2003.

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

“Intrathecal Baclofen and the Treatment of Neuromuscular Scoliosis,” Scoliosis Research Society Neuromuscular Scoliosis Tutorial, Wilmington, DE, 2003.

“Baclofen Pump Implantation Techniques and Challenges,” Advanced Practices in Intrathecal Baclofen Therapy Conference, Atlanta, GA, 2003.

“Orthopaedic Approaches for Spasticity Management in Children,” Advanced Practices in Intrathecal Baclofen Therapy Conference, Atlanta, GA, 2003.

“Current Concepts and Advancements in Adolescent Spinal Deformity Surgery,” Thomas Jefferson University Department of Orthopaedic Surgery Grand Rounds, Philadelphia, PA, 2003.

“Pedicule Screw Fixation in the Thoracic Spine,” International Pediatric Orthopaedic Symposium Workshop, San Diego, CA, 2003.

“Sacro-pelvic Fusion and Instrumentation Techniques,” International Pediatric Orthopaedic Symposium Workshop, San Diego, CA, 2003.

“Pediatric Spinal Deformity Challenges,” 17th Isola Study Group, Dallas, TX, 2004.

“L5 Vertebrectomy for Spondyloptosis: A Case Presentation of the Gaines Procedure,” Scoliosis Research Society Tutorial, Wilmington, DE, 2004.

“Anterior Approaches for the Treatment of Adolescent Spinal Deformity,” Alfred I. duPont Hospital for Children Perioperative Nursing Conference, Wilmington, DE, 2004.

“Current Concepts and Advancements in Adolescent Spinal Deformity Surgery,” Alfred I. duPont Hospital for Children Grand Rounds, Wilmington, DE, 2004.

“Sacro-pelvic Fusion and Instrumentation Techniques,” Pediatric Orthopaedic Society of North America Annual Meeting Advanced Spinal Deformity Workshop, St. Louis, MO, 2004.

“The Use of Thoracic Pedicle Screws in Adolescent Deformity,” Masters Deformity Course, Denver, CO, 2004.

“Sacropelvic Fixation in Neuromuscular Deformity,” Masters Deformity Course, Denver, CO, 2004.

“Technique of Thoracoscopic Anterior Spinal Release,” Passionate about Scoliosis International Meeting, Perthshire, Scotland, 2004.

“Thoracoscopic Anterior Spinal Instrumentation: Indications, Technique and Limitations,” Passionate about Scoliosis International Meeting, Perthshire, Scotland, 2004.

“Orthopaedic Approaches for Spasticity Management in Children,” Medtronic Intrathecal Baclofen Therapy Conference, Managing Severe Spasticity: The Role of ITB Therapy, Minneapolis, MN, 2004.

“Intrathecal Baclofen Pump Implantation Techniques and Challenges,” Medtronic Intrathecal Baclofen Therapy Conference, Managing Severe Spasticity: The Role of ITB Therapy, Minneapolis, MN, 2004.

“Intrathecal Baclofen Pump Troubleshooting,” Medtronic Intrathecal Baclofen Therapy Conference, Minneapolis, MN, 2004.

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

“Anatomic Position of the Aorta Before and After Anterior Thoracoscopic Spinal Surgery for Scoliosis,” 18th Isola Study Group, Kansas City, MO, 2004.

“Adolescent Idiopathic Scoliosis: Current State of the Art,” Guest Lecturer, University of Medicine and Dentistry of New Jersey, Stratford, NJ, 2004.

“Back Pain / Neck Pain in the Adolescent,” Department of Pediatrics Grand Rounds, Chester County Hospital, West Chester, PA, 2004.

“Thoracic Pedicle Screws in Adolescent Idiopathic Scoliosis: Technique, Rationale, Pros and Cons,” Advanced Techniques in Posterior Spinal Deformity Surgery Tutorial, San Diego, CA, 2004.

“Sacral/Pelvic Fixation Options in Spinal Deformity Correction,” Advanced Techniques in Posterior Spinal Deformity Surgery Tutorial, San Diego, CA, 2004.

“Thoracoscopic Spinal Deformity Surgery: Indications, Techniques and Complications,” Department of Anesthesiology and Critical Care Grand Rounds, Alfred I. duPont Hospital for Children, Wilmington, DE, 2004.

“Overuse Athletic Injuries in the Adolescent/Pediatric Population,” Medical Aspects of Sports, 36th Annual Seminar, Department of Health and Exercise Science, University of Delaware, Newark, DE, 2005.

“Orthopaedic Approaches for Spasticity Management in Children and the Spectrum of Care,” Managing Severe Spasticity: The Role of ITB Therapy Conference, Dallas, TX, 2005.

“Intrathecal Baclofen Pump Implantation: Technique, Revision and Challenges,” Managing Severe Spasticity: The Role of ITB Therapy Conference, Dallas, TX, 2005.

“Intrathecal Baclofen Pump Advanced Troubleshooting,” Managing Severe Spasticity: The Role of ITB Therapy Conference, Dallas, TX, 2005.

“Sacral/Pelvic Fixation: Techniques and Results,” Advanced Techniques in Posterior Spinal Deformity Surgery Tutorial, Philadelphia, PA, 2005.

“The Treatment of Scoliosis in Cerebral Palsy,” Spinal Deformity Summit, Phoenix, AZ, 2005.

“Pediatric Kyphosis: Scheuermann’s Disease and Congenital Kyphosis,” Spinal Deformity Summit, Phoenix, AZ, 2005.

“Thoracoscopic Anterior Instrumentation: Indications, Techniques and Limitations,” Department of Orthopaedic Surgery Grand Rounds, Hokkaido University Hospital, Sapporo, Japan, 2005.

“Thoracoscopic Spinal Deformity Surgery: Indications, Techniques and Complications,” The 22nd Spring Congress, Korean Society of Spine Surgery, Jeju Island, Korea, 2005.

“Adolescent Spinal Deformity: The Role and Technique of Thoracic Pedicle Screws,” Key Note Speaker, Chinese Speaking Orthopedic Society Advanced Spine Course, Beijing, China, 2005.

“The Increased Incidence of Wound Infection after Pancreatitis in Neuromuscular Scoliosis Surgery,” Peking University Third Hospital, Beijing, China, 2005.

“The Incidence and Associated Complications of Pancreatitis in Scoliosis Surgery,” Department of Orthopaedics, Peking Union Medical College Hospital, Beijing, China, 2005.

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

“The Use of Fulcrum Bending Radiographs in the Treatment of Adolescent Idiopathic Scoliosis with Pedicle Screw Instrumentation,” Orthopaedic Spine Service Grand Rounds, Queen Mary Hospital, Hong Kong University, Hong Kong, 2005.

“Spinal Fusion in Ambulatory Cerebral Palsy Patients: Can a Child Walk after Instrumentation to the Pelvis?” Department of Orthopaedics and Traumatology Research Day, Prince of Wales Hospital, Chinese University of Hong Kong, Hong Kong, 2005.

“Adolescent Spinal Deformity: The Role and Technique of Thoracic Pedicle Screws,” Department of Orthopaedics and Traumatology Research Day, Chinese University of Hong Kong, Hong Kong, 2005.

“Thoracoscopic Spinal Deformity Surgery: Indications, Techniques and Complications,” Thai Spinal Society Conference, Siriraj Hospital, Bangkok, Thailand, 2005.

“Adolescent Spinal Deformity: The Role and Technique of Thoracic Pedicle Screws,” Department of Orthopaedic Surgery Grand Rounds, Chulalongkorn University Memorial Hospital, Bangkok, Thailand, 2005.

“Spinal Fusion in Ambulatory Cerebral Palsy Patients: Can a Child Walk after Instrumentation to the Pelvis?” Department of Orthopaedic Surgery Grand Rounds, Chulalongkorn University Memorial Hospital, Bangkok, Thailand, 2005.

“The Treatment of Neuromuscular Scoliosis,” Department of Orthopaedic Surgery Guest Lecture, Phramongkutklao Army Hospital, Bangkok, Thailand, 2005.

“Loss of Coronal Correction Following Instrumentation Removal In Adolescent Idiopathic Scoliosis,” Department of Orthopaedic Surgery, Spinal Service Grand Rounds, Singapore General Hospital, Singapore, 2005.

“The Free Hand Placement, Learning Curve and Role of Thoracic Pedicle Screws for Scoliosis,” Department of Orthopaedic Surgery Guest Lecture, National University Hospital, National University of Singapore, Singapore, 2005.

“Scoliosis: Current Concepts and State of the Art,” Nemours Cape Cod Pediatric Symposium, Hyannis, MA, 2005.

“Primarily Orthopaedics,” Nemours Cape Cod Pediatric Symposium, Hyannis, MA, 2005.

“Diagnostic Dilemmas in Pediatric Orthopaedics,” Nemours Cape Cod Pediatric Symposium, Hyannis, MA, 2005.

“The Monarch™ Spinal System for the Treatment of Adolescent Idiopathic Scoliosis: A Practice Audit,” 21st Isola Study Group, Seattle, WA, 2005.

“Pros and Cons of Thoracic Pedicle Screw Use in Adolescent Idiopathic Scoliosis,” Advanced Techniques in Posterior Spinal Deformity Surgery Tutorial, San Diego, CA, 2005.

“Anterior Scoliosis Treatment Options,” Advanced Techniques in Posterior Spinal Deformity Surgery Tutorial, San Diego, CA, 2005.

“Thoracoscopic Anterior Spinal Fusion and Instrumentation for Scoliosis,” Mexican Pediatric Orthopaedic Society, 19th International Congress, Mérida Yucatán, Mexico, 2005.

“Thoracic Pedicle Screw Insertion, Derotation and Correction Techniques for Scoliosis,” Mexican Pediatric Orthopaedic Society, 19th International Congress, Mérida Yucatán, Mexico, 2005.

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

“A Prospective Comparison of Coronal Deformity Correction in Thoracic Scoliosis Using Segmental Thoracic Pedicle Screw Instrumentation and Fulcrum-Bending Radiographs,” Mexican Pediatric Orthopaedic Society, 19th International Congress, Mérida Yucatán, Mexico, 2005.

“Spondylolysis in Children and Adolescents,” Mexican Pediatric Orthopaedic Society, 19th International Congress, Mérida Yucatán, Mexico, 2005.

“Pediatric Scoliosis: Current Concepts and State of the Art,” Delaware Society of Orthopaedic Surgeons Annual Meeting, Dover, DE, 2005.

“Treatment of Scoliosis and Pelvic Obliquity,” Cerebral Palsy Treatment: Current Concepts Update, Wilmington, DE, 2005.

“Intrathecal Baclofen Therapy for the Treatment of Spasticity: Implantation, Management and Troubleshooting,” Cerebral Palsy Treatment: Current Concepts Update, Wilmington, DE, 2005.

“Sacral/Pelvic Fixation: Techniques and Results,” Advanced Techniques in Posterior Spinal Deformity Surgery Tutorial, Philadelphia, PA, 2005.

“Early Experience with the Expedium™ Spinal System,” Advanced Techniques in Posterior Spinal Deformity Surgery Tutorial, Philadelphia, PA, 2005.

“Thoracic Pedicle Screws and 3D Correction of Adolescent Idiopathic Scoliosis,” 18th Annual Contemporary Update on Disorders of the Spine, Whistler, BC, Canada, 2006.

“Practice Variation in the Management of Spinal Deformity Surgery,” Nemours Clinical Management Program Scoliosis Summit, Orlando, FL, 2006.

“Neurologic Complications During Deformity Surgery and Treatment Recommendations,” Controversies in Contemporary Spine Surgery, San Francisco, CA, 2006.

“Vertebral Body Derotation Maneuvers for Adolescent Idiopathic Scoliosis,” Advanced Deformity Cadaver Lab, Las Vegas, NV, 2006.

“Current Concepts and the State of the Art in Pediatric Spinal Deformity Surgery,” The Child with Special Orthopaedic Needs, Wilmington, DE, 2006.

“Scoliosis in Cerebral Palsy,” Masters Deformity Summit, Miami, FL, 2006.

“Anterior vs. Posterior Spinal Approach: Decision Making,” Masters Deformity Summit, Miami, FL, 2006.

“Thoracic Pedicle Screw Techniques in Adolescent Spinal Deformity Surgery,” Scoliosis Research Society Tutorial and Live Surgical Demonstration (Course Director), Wilmington, DE, 2006.

“Pros and Cons of Thoracic Pedicle Screw Use in Scoliosis,” Spinal Deformity Tutorial, San Diego, CA, 2006.

“Thoracic Pedicle Screw Insertion Techniques and Vertebral Body Derotation,” Spinal Deformity Tutorial, San Diego, CA, 2006.

“Sacral/Pelvic Fixation: Techniques and Results,” Advanced Techniques in Posterior Spinal Deformity Surgery Tutorial, Philadelphia, PA, 2006.

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

“Early Experience with the Expedium™ Spinal System,” Advanced Techniques in Posterior Spinal Deformity Surgery Tutorial, Philadelphia, PA, 2006.

“Vertebral Body Derotation Maneuvers for Adolescent Idiopathic Scoliosis,” Advanced Techniques in Posterior Spinal Deformity Surgery Tutorial, Philadelphia, PA, 2006.

“Thoracoscopic Portal Placement, Tips on Visualization, Minimizing Blood Loss and Placement of Instrumentation,” 6th Annual Thomas Jefferson Spine Fellows Symposium, Newport, RI, 2006.

“Vertebral Body Derotation Maneuvers for Adolescent Idiopathic Scoliosis,” Philadelphia Pediatric Spine Symposium, Philadelphia, PA, 2006.

“Pros and Cons of Thoracic Pedicle Screws in Adolescent Idiopathic Scoliosis,” Scoliosis Research Traveling Fellows Spine Symposium, Wilmington, DE, 2006.

“Rationale for Pedicle Screw Instrumentation in Spinal Deformity,” Advanced Posterior Spinal Deformity Tutorial, San Diego, CA, 2006.

“Thoracic Pedicle Screw Insertion Techniques and Vertebral Body Derotation,” Advanced Posterior Spinal Deformity Tutorial, San Diego, CA, 2006.

“Management of Pediatric Deformities,” Emerging Concepts in Spine Surgery, Mumbai, India, 2007.

“Thoracic Pedicle Screw Use in Adolescent Deformity and Vertebral Body Derotation Maneuvers,” Advanced Posterior Deformity Tutorial (Course Director), Wilmington, DE, 2007.

“Vertebral Body Derotation and Correction Techniques in AIS,” Advanced Spinal Deformity Workshop and Hands-On Lab, Las Vegas, NV, 2007.

“Congenital Spinal Deformity: Observe or Operate,” Pediatric Spinal Deformity: On the Cutting Edge, Miami, FL, 2007.

“Surgical Treatment of Congenital Deformity of the Thoracic Spine and Thoracolumbar Junction,” Pediatric Spinal Deformity: On the Cutting Edge, Miami, FL, 2007.

“Nonoperative Treatment of Early Onset Scoliosis,” Pediatric Spinal Deformity: On the Cutting Edge, Miami, FL, 2007.

“Pros and Cons of Thoracic Pedicle Screw Use in Scoliosis,” Advanced Spinal Deformity Tutorial, San Diego, CA, 2007.

“Sacral/Pelvic Fixation: Techniques and Results,” Advanced Spinal Deformity Tutorial, San Diego, CA, 2007.

“Thoracic Pedicle Screw Insertion Techniques and Vertebral Body Derotation,” Advanced Spinal Deformity Tutorial, San Diego, CA, 2007.

“Pediatric Deformity,” Early Bird Roundtable Discussion, 14th International Meeting on Advanced Spine Techniques, Bahamas, 2007.

“Management Options in the Treatment of Early Onset Scoliosis,” Instructional Course Lecture, 14th International Meeting on Advanced Spine Techniques, Bahamas, 2007.

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

“Scoliosis: Current Concepts and Future Directions,” Jefferson Medical College Department of Pediatrics Grand Rounds, Philadelphia, PA, 2007.

“Pediatric Orthopaedic Injuries,” Pediatric Trauma – Protecting our Future, Wilmington, DE, 2007.

“Treatment of Scoliosis and Pelvic Obliquity,” Orthopaedic Treatment of Cerebral Palsy: Current Concepts Update POSNA Tutorial, Wilmington, DE, 2007.

“Intrathecal Baclofen Therapy for the Treatment of Spasticity: Implantation, Management and Troubleshooting,” Orthopaedic Treatment of Cerebral Palsy: Current Concepts Update POSNA Tutorial, Wilmington, DE, 2007.

“Complications of Spinal Surgery for Neuromuscular Scoliosis,” Orthopaedic Treatment of Cerebral Palsy: Current Concepts Update POSNA Tutorial, Wilmington, DE, 2007.

“The Pediatric Orthopaedic Exam,” R.O.Y. Warren Memorial Medical Seminar, Wilmington, DE 2007.

“Pediatric Orthopaedic Injuries,” Pediatric Trauma – Protecting Our Future Conference, Wilmington, DE, 2007. Published at PedsEducation.org (http://www.pedseducation.org/online_education/UnitPage.cfm?unitID=20080205).

“Junctional Problems in Spinal Surgery,” Complications in Spine Surgery – A Case Based Approach, Las Vegas, NV, 2007.

“Neurological Complications in Spinal Deformity Surgery,” Complications in Spine Surgery – A Case Based Approach, Las Vegas, NV, 2007.

Instructional Course Lectures and Workshops, 4th International Pediatric Orthopaedic Symposium, Orlando, FL, 2007.

“Fusionless Treatment of Scoliosis: An Update,” Grand Rounds Presentation, Great Ormond Street Hospital, London, England, 2008.

“Pros and Cons of Thoracic Pedicle Screw Use in Pediatric/Adolescent Deformity,” Cedars-Sinai Seventh Annual Symposium on Current Concepts in Spinal Disorders, Las Vegas, NV, 2008.

“Fusionless Treatment for Scoliosis,” Cedars-Sinai Seventh Annual Symposium on Current Concepts in Spinal Disorders, Las Vegas, NV, 2008.

“Apical Derotation vs. Thoracic Hypokyphosis,” Vail Spinal Summit, Vail, CO, 2008.

“Minimally Invasive Proximal and Distal Fixation in Deformity Surgery,” “Advanced Deformity Hands-On Practical Lab, Las Vegas, NV, 2008.

“Vertebral Derotation Techniques,” Advanced Deformity Hands-On Practical Lab, Las Vegas, NV, 2008.

“The Ponte Osteotomy for Deformities Other than Scheuermann’s Kyphosis,” Advanced Spinal Deformity Summit, Miami, FL, 2008.

“Vertebral Body Derotation: Does it Work?” Advanced Spinal Deformity Summit, Miami, FL, 2008.

“Surgical Treatment of Congenital Deformity of the Thoracic Spine and Thoracolumbar Junction,” Advanced Spinal Deformity Summit, Miami, FL, 2008.

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

“Minimally Invasive Instrumentation in Spinal Deformity Surgery: Managing the Learning Curve,” Advanced Spinal Deformity Summit, Miami, FL, 2008.

“Spondylolysis and Spondylolisthesis,” POSNA One Day Course: Sports Related Injuries in the Skeletally Immature Athlete, Albuquerque, NM, 2008.

“Debate: Overzealous Correction of the Frontal Plane in Scoliosis Surgery,” Passionate about Spine Meeting, Brocket Hall, Welwyn, England, 2008.

“The Treatment of Scoliosis in Cerebral Palsy: The Controversies,” Passionate about Spine Meeting, Brocket Hall, Welwyn, England, 2008.

“Fusionless Surgery for Scoliosis,” Passionate about Spine Meeting, Brocket Hall, Welwyn, England, 2008.

Instructional Course Lectures and Workshops, 5th International Pediatric Orthopaedic Symposium, Orlando, FL, 2008.

“Debate: Pedicle Screws for Spinal Deformity,” Federation of Spine Surgeons 2009 Specialty Day, Las Vegas, NV, 2009.

“Fusion and Correction Tips with MIS in AIS,” Advanced Deformity Hands-On Practical Lab, Las Vegas. NV, 2009.

“Vertebral Derotation Techniques,” Advanced Deformity Hands-On Practical Lab, Las Vegas. NV, 2009.

“AIS: Predicting Progression from Skeletal Maturity,” Pediatric Spinal Deformity: On the Cutting Edge II, Miami, FL, 2009.

“Early Onset Scoliosis: Fusion Under Age 8,” Pediatric Spinal Deformity: On the Cutting Edge II, Miami, FL, 2009.

“Uniplanar Screws in AIS Surgery,” Pediatric Spinal Deformity: On the Cutting Edge II, Miami, FL, 2009.

“Rod Contour and Mechanics...What is Ideal?” Pediatric Orthopaedic Society of North America One Day Course: Adolescent Idiopathic Scoliosis: Understanding the Deformity and Current Treatment, Boston, MA, 2009.

Spine Symposium Co-Chairman, Pediatric Orthopaedic Society of North America 25th Annual Meeting, Boston, MA 2009.

“Pediatric/Adolescent Lower Extremity Exam and Common Conditions,” Pediatric Kaleidoscope: Clinical Challenges for the Practitioner, Wilmington, DE, 2009.

“Have Contemporary Scoliosis Classification Systems Translated into Useful Guidelines for Fusion Indications and Helped Determined Fusion Levels?” Controversies in Contemporary Spine Surgery, Washington DC, 2009.

“Adolescent Idiopathic Scoliosis,” Instructional Course Lecture (Moderator), 16th International Meeting on Advanced Spine Techniques, Vienna, Austria, 2009.

“Minimally Invasive Techniques for Scoliosis Surgery,” Passionate About Spine Meeting, Madrid, Spain, 2009.

“Spondylolysis and Spondylolisthesis,” Passionate About Spine Meeting, Madrid, Spain, 2009.

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

“Surgical Options for Spondylolisthesis,” Complex Spine Study Group, Washington, DC, 2009.

“Pedicle Screw Rescue Techniques and Alternatives,” Scoliosis Research Society Pre-Meeting Course, San Antonio, TX, 2009.

“Incorporating Prognostic Genetic Testing into Your Scoliosis Practice,” Educational Symposium Chairman in combination with the Scoliosis Research Society Annual Meeting, San Antonio, TX, 2009.

“Back Pain in the Young Athlete,” 2nd Annual Delaware Orthopaedic Symposium, Newark, DE, 2009.

“Adolescent Idiopathic Scoliosis for the Next Decade: Where are We Going?” 43rd Annual Meeting of the Japanese Scoliosis Society, Presidential Invited Lecture, Tokyo, Japan, 2009.

“Controversies and Challenges of the Treatment of Neuromuscular Scoliosis,” 43rd Annual Meeting of the Japanese Scoliosis Society, Presidential Invited Lecture, Tokyo, Japan, 2009.

“Spine Surgery Complications: Prevention and Management,” 6th International Pediatric Orthopaedic Symposium, Orlando, FL, 2009.

“Spinal Fusion in Osteogenesis Imperfecta and Osteoporotic Bone,” 6th International Pediatric Orthopaedic Symposium, Orlando, FL, 2009.

“Using the ScoliScore Genetic Test in Your Practice,” 6th International Pediatric Orthopaedic Symposium, Orlando, FL, 2009.

“Normal Radiographic Parameters in the Pediatric Cervical Spine and Advanced Imaging,” Pediatric Cervical Spine: Current Concepts and Techniques of Management (Instructional Course Moderator), Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, 2010.

“Cervical Spinal Instrumentation,” Pediatric Cervical Spine: Current Concepts and Techniques of Management (Instructional Course Moderator), Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, 2010.

“The Case Against Pedicle Screws - Debate: Pedicle Screws for Spinal Deformity,” Federation of Spine Surgeons 2010 Specialty Day, New Orleans, LA, 2010.

“Sports and Spondylolysis: Evaluation and Management: Does Nonoperative Treatment Work? When to Operate?” Pediatric Orthopaedic Society of North America Specialty Day, New Orleans, LA, 2010.

“Etiology, Natural History and Genetics of Scoliosis,” Spinal Deformity Tutorial, San Diego, CA, 2010.

“Pedicle Anatomy and Surgical Technique of Pedicle Screw Insertion,” Spinal Deformity Tutorial, San Diego, CA, 2010.

“Vertebral Derotation and Rod Contouring,” Spinal Deformity Tutorial, San Diego, CA, 2010.

“Neuromuscular Scoliosis and Instrumentation to the Pelvis,” Spinal Deformity Tutorial, San Diego, CA, 2010.

Spine Symposium Chairman, Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa, HI, 2010.

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

“Contemporary Topics in Genetic Testing for Scoliosis,” Educational Symposium in combination with the Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa, HI, 2010

“Vertebral Body Derotation Techniques,” Spinal Deformity Summit: Advancing the Treatment of Scoliosis, Raynham, MA, 2010.

“Junctional Kyphosis: Prevention and Treatment,” Spinal Deformity Summit: Advancing the Treatment of Scoliosis, Raynham, MA, 2010.

“Modern Techniques for Pediatric Deformity Correction,” Spinal Deformity Summit: Advancing the Treatment of Scoliosis, Raynham, MA, 2010.

Course Director, “Adolescent Idiopathic Scoliosis: Current Concepts, Challenges and Complications,” AAOS/SRS Webinar, May 25, 2010. http://www7.aaos.org/education/courses/course_detail.aspx?ProductId=11834

Moderator, Scientific Session “Complications and Monitoring,” 17th International Meeting on Advanced Spine Techniques, Toronto, Canada, 2010.

“Pediatric Deformity Roundtable Case Discussion,” 17th International Meeting on Advanced Spine Techniques, Toronto, Canada, 2010.

“Distraction-based Treatment for Early-Onset Spinal Deformity,” Complex Spine Study Group, Washington, DC, 2010.

“Future Trends in the Treatment of Scoliosis: AIS in the Next Decade,” Grand Rounds Presentation / Visiting Professor, Arnold Palmer Hospital for Children, Orlando, FL, 2010.

“Modern Classification Systems for AIS: Do They Guide Us in Recommending Fusion Levels?” Florida Spinal Deformity Study Group, Orlando, FL, 2010.

“Posterior Release Techniques for Spinal Deformity Correction,” Florida Spinal Deformity Study Group, Orlando, FL, 2010.

“The Treatment of Scoliosis in Bad Bone with Cement-Augmented Pedicle Screw Fixation,” Florida Spinal Deformity Study Group, Orlando, FL, 2010.

Focused Paper Presentations (Moderator), North American Spine Society 25th Annual Meeting, Orlando, FL, 2010.

“Syndromic Spine Deformity,” 4th International Congress on Early Onset Scoliosis and Growing Spine (ICEOS), Toronto, Canada, 2010.

“Surgical Decision-Making: Scoliosis, Kyphosis, EOS,” 7th International Pediatric Orthopaedic Symposium, Orlando, FL, 2010.

“Idiopathic Scoliosis: Selection of Fusion Levels,” 7th International Pediatric Orthopaedic Symposium, Orlando, FL, 2010.

“Spondylolysis and Spondylolisthesis,” 7th International Pediatric Orthopaedic Symposium, Orlando, FL, 2010.

“AIS Prognostic Test Update,” 7th International Pediatric Orthopaedic Symposium, Orlando, FL, 2010.

“Novel Derotation Techniques in AIS,” 7th International Pediatric Orthopaedic Symposium, Orlando, FL, 2010.

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

“AIS Case Review,” 7th International Pediatric Orthopaedic Symposium, Orlando, FL, 2010.

“Treatment Challenges in Early Onset Scoliosis,” Visiting Professor, Pediatric Spine Update, ALL India Institute of Physical Medicine and Rehabilitation, Mumbai, India, 2011.

“Classification of Adolescent Idiopathic Scoliosis and its Role in Planning Surgery,” Association of Spinal Surgeons of India 24th Annual Conference, Mumbai, India, 2011.

“Choosing Anchorage Elements and Correction Maneuvers in Adolescent Idiopathic Scoliosis,” Association of Spinal Surgeons of India 24th Annual Conference, Mumbai, India, 2011.

“Proximal and Distal Junctional Problems after Deformity Surgery,” Association of Spinal Surgeons of India 24th Annual Conference, Mumbai, India, 2011.

“Growing Rod Techniques in Early Onset Scoliosis,” Association of Spinal Surgeons of India 24th Annual Conference, Mumbai, India, 2011.

“Kyphosis – Scheuermann and Congenital,” Association of Spinal Surgeons of India 24th Annual Conference, Mumbai, India, 2011.

Guest Lectures and Case Presentations (Moderator), Association of Spinal Surgeons of India 24th Annual Conference, Mumbai, India, 2011.

“High Grade Spondylolisthesis: An Overview of Surgical Techniques,” Association of Spinal Surgeons of India 24th Annual Conference, Mumbai, India, 2011.

“Normal Radiographic Parameters in the Pediatric Cervical Spine and Advanced Imaging,” Pediatric Cervical Spine: Current Concepts and Techniques of Management (Instructional Course Moderator), Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA 2011.

“Cervical Spinal Instrumentation,” Pediatric Cervical Spine: Current Concepts and Techniques of Management (Instructional Course Moderator), Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA 2011.

“Etiology, Natural History and Genetics of Scoliosis,” Spinal Deformity Tutorial, San Diego, CA, 2011.

“Pedicule Anatomy and Surgical Technique of Pedicle Screw Insertion,” Spinal Deformity Tutorial, San Diego, CA, 2011.

“Vertebral Derotation and Rod Contouring,” Spinal Deformity Tutorial, San Diego, CA, 2011.

“Neuromuscular Scoliosis and Instrumentation to the Pelvis,” Spinal Deformity Tutorial, San Diego, CA, 2011.

“ScoliScore 2011: Update and How I Use it in Practice,” Pediatric Spinal Deformity: On the Cutting Edge III, Miami, FL, 2011.

“Juvenile Idiopathic Scoliosis: Approach, Plan, Results,” Pediatric Spinal Deformity: On the Cutting Edge III, Miami, FL, 2011.

“Peri-Operative Neurological Events in Deformity Surgery: Panel Discussion,” Pediatric Spinal Deformity: On the Cutting Edge III, Miami, FL, 2011.

Moderator: “Neuromuscular Scoliosis,” Pediatric Spinal Deformity: On the Cutting Edge III, Miami, FL, 2011.

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

“Pediatric Kyphosis – Scheuermann and Congenital,” Grand Rounds Presentation / Visiting Professor, St. Luke’s-Roosevelt Hospital, New York, NY, 2011.

“Modern Techniques for Spinal Deformity Correction,” Grand Rounds Presentation / Visiting Professor, St. Luke’s-Roosevelt Hospital, New York, NY, 2011.

“Current Concepts and State of the Art of the Treatment of Scoliosis,” Bones, Breaks and Spines: A Day of Orthopaedics, Nemours/Alfred I. duPont Hospital for Children, Wilmington, DE, 2011.

“Adolescent Idiopathic Scoliosis in the Next Decade: Where are We Going?” Great Ormond Street Hospital for Children NHS Trust Visiting Professor in Orthopaedic Surgery, London, England, 2011.

“The Role of Intrathecal Baclofen Therapy in the Management of Spasticity in Cerebral Palsy,” Great Ormond Street Hospital for Children NHS Trust Visiting Professor in Orthopaedic Surgery, London, England, 2011.

“Diagnoses and Impairments of the Spine in Infants, Children and Adolescents,” Annual Conference and Exposition of the American Physical Therapy Association, Washington, DC, 2011.

“Fractures: Implications for Growth and Development,” Annual Conference and Exposition of the American Physical Therapy Association, Washington, DC, 2011.

“Burners/Stingers and Cervical Cord Neurapraxia,” AAOS/POSNA Pediatric Orthopaedics and Sports Medicine: From the ER to OR- Essentials for the Practicing Orthopaedic Surgeon, Baltimore, MD, 2011.

“Spondylolysis and Spondylolisthesis – An Update,” AAOS/POSNA Pediatric Orthopaedics and Sports Medicine: From the ER to OR- Essentials for the Practicing Orthopaedic Surgeon, Baltimore, MD, 2011.

“Throwing Injuries of the Elbow: OCD Lesion Management,” AAOS/POSNA Pediatric Orthopaedics and Sports Medicine: From the ER to OR- Essentials for the Practicing Orthopaedic Surgeon, Baltimore, MD, 2011.

“Knee OCD Lesion Treatment Options,” AAOS/POSNA Pediatric Orthopaedics and Sports Medicine: From the ER to OR- Essentials for the Practicing Orthopaedic Surgeon, Baltimore, MD, 2011.

“Ankle OCD,” AAOS/POSNA Pediatric Orthopaedics and Sports Medicine: From the ER to OR- Essentials for the Practicing Orthopaedic Surgeon, Baltimore, MD, 2011.

“Growth Modulation in Scoliosis,” The Future of Adolescent Idiopathic Scoliosis Surgery, Copenhagen, Denmark, 2011.

“Assessment of Skeletal Maturity,” Early Onset Scoliosis Instructional Course Lecture, 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

“Tethering Options for Scoliosis,” Early Onset Scoliosis Instructional Course Lecture, 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Moderator, Congenital and Neuromuscular Scoliosis Podium Session, 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

“Vertebral Body Derotation,” Adolescent Idiopathic Scoliosis II: Correction Techniques for Simple to Severe Curves Instructional Course Lecture, 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

Moderator, Adolescent Idiopathic Scoliosis II: Correction Techniques for Simple to Severe Curves Instructional Course, 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

“Pediatric Deformity: My Worst Complication and How I Treated It,” 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

Moderator, Roundtable Case Discussion: Pediatric Deformity, 18th International Meeting on Advanced Spine Techniques, Copenhagen, Denmark, 2011.

“Technique of Early Spinal Fusion,” Growth Sparing Treatment of Early Onset Neuromuscular Spinal Deformity Instructional Course Lecture, Scoliosis Research Society 46th Annual Meeting and Course, Louisville, KY, 2011.

“Spondylolysis/Spondylolisthesis: Options for MIS, Open Treatment and Techniques for High Grade Reduction,” 15th Hokkaido University Spinal Reconstruction Seminar, Sapporo, Japan, 2011.

“Modern Deformity Correction Techniques and Future Trends for Adolescent Idiopathic Scoliosis,” 15th Hokkaido University Spinal Reconstruction Seminar, Sapporo, Japan, 2011.

“Intraoperative and Postoperative Challenges in Pediatric Spinal Deformity Surgery,” Minimizing Complications and Improving Safety, Scoliosis Research Society Pre Meeting Course, Louisville, KY, 2011.

“Early Fusion as an Option for Neuromuscular Early Onset Spinal Deformity,” Growing Spine Instructional Course Lecture, 47th Annual Meeting of the Scoliosis Research Society, Louisville, KY, 2011.

“The Treatment of Cerebral Palsy Scoliosis: Complications and Outcomes,” Visiting Lecturer for the New York Pediatric Orthopaedic Club, New York, NY, 2011.

“Spondylolysis and Spondylolisthesis: The Spectrum of Indications of MIS to Open, High Grade Reduction,” Grand Rounds Presentation / Visiting Professor, St. Luke’s-Roosevelt Hospital, New York, NY, 2011

“Modern Techniques in Spinal Deformity Correction,” 45th Annual Meeting of the Japanese Scoliosis Society, President’s Invited Guest Lecturer, Kurume, Japan, 2011.

“Evolution of Sagittal Plane Correction in AIS: Addressing the Hypokyphosis Problem with Uniplanar Screws and VBD Techniques,” 45th Annual Meeting of the Japanese Scoliosis Society, President’s Invited Guest Lecturer, Kurume, Japan, 2011.

“Cervical Spine Instrumentation Techniques,” 5th International Congress on Early Onset Scoliosis and Growing Spine, Orlando, FL, 2011.

“Normal Radiographic Parameters in the Pediatric Cervical Spine and Advanced Imaging,” Pediatric Cervical Spine: Current Concepts and Techniques of Management (Instructional Course Moderator), Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco, CA, February 2012.

“Cervical Spinal Instrumentation,” Pediatric Cervical Spine: Current Concepts and Techniques of Management (Instructional Course Moderator), Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco, CA, February 2012.

“My Worst Complication in Spinal Surgery: Evaluation, Management and Outcomes,” Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco, CA, February 2012.

“3-D Evaluation of Spinal Deformity,” Deformity Peer to Peer Keynote Address, Miami, FL, February 2012.

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

Moderator and Course Co-Chair, Complications of the Very Young and Very Old and Level Selection in Adolescent Idiopathic Scoliosis, Deformity Peer to Peer Meeting, Miami, FL, February 2012.

“Early Onset Scoliosis: Defining the Extent of the Problem,” Combined Scoliosis Research Society Worldwide Course and Association of Spinal Surgeons of India 25th Annual Conference, Delhi, India, February 2012.

Moderator, Early Onset Scoliosis Scientific Session, Combined Scoliosis Research Society Worldwide Course and Association of Spinal Surgeons of India 25th Annual Conference, Delhi, India, February 2012.

“Complications in Spinal Deformity Surgery,” Combined Scoliosis Research Society Worldwide Course and Association of Spinal Surgeons of India 25th Annual Conference, Delhi, India, February 2012.

“Indications, Advantages and Complications of Percutaneous Pedicle Screws,” Combined Scoliosis Research Society Worldwide Course and Association of Spinal Surgeons of India 25th Annual Conference, Delhi, India, February 2012.

“Prognosis of AIS after Maturity...Concerns,” Complex Spinal Deformity Symposium, San Francisco, CA, March 2012.

“Rod Contour and Biomechanics: What is Ideal for Spinal Deformity Correction?” Spinal Deformity Summit, Boston, MA, April 2012.

“Challenges and Outcomes of Spinal Fixation in the Osteoporotic Spine,” Spinal Deformity Summit, Boston, MA, April 2012.

“Assessment of Skeletal Maturity,” Early Onset Scoliosis Instructional Course Lecture, 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, July 2012.

“Tethering Options for Scoliosis,” Early Onset Scoliosis Instructional Course Lecture, 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, July 2012.

Moderator, Adolescent Idiopathic Scoliosis Podium Session, 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, July 2012.

Moderator, Adolescent Idiopathic Scoliosis Instructional Course, “Correction Techniques for Simple to Severe Curves, 19th International Meeting on Advanced Spine Techniques, Istanbul, Turkey, July 2012.

Pediatric Subgroup Collaborator, AAOS Orthopaedic Patient Safety Summit, Chicago, IL, August 2012.

“Pediatric Spinal Infections: Have the Etiology, Incidence, Demographics and Treatment Modalities Changed Over the Past 10 Years? Neuromuscular and Myelomeningocele,” Instructional Half Day Course, Scoliosis Research Society 47th Annual Meeting and Course, Chicago, IL, August 2012.

Case Presentations, “Acute Postoperative and Pyogenic Osteomyelitis: Discussion of Treatment Options,” Scoliosis Research Society 47th Annual Meeting and Course, Chicago, IL, August 2012.

Moderator, Early Onset Scoliosis Session, Scoliosis Research Society 47th Annual Meeting and Course, Chicago, IL, August 2012.

“Scolioscore: Has it Proven Effective in Predicting the Progression of Scoliosis?” A Decade of Evolution in Spine Deformity Management: A Critical Appraisal of Practice Changes, Outcomes and Technology, Scoliosis Research Society 47th Annual Meeting and Course, Chicago, IL, August 2012.

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

“Spondylolysis and Spondylolisthesis” and “Adolescent Idiopathic Scoliosis: Three Dimensional Correction Techniques,” NYU Langone/Hospital for Joint Diseases Department of Orthopaedic Surgery Grand Rounds, New York NY, October 2012.

“Key Concepts in Early Onset Scoliosis,” and “The Next Decade in AIS: What will it Bring?” Georgetown University Hospital Department of Orthopaedic Surgery Grand Rounds, Washington DC, October 2012.

“Pediatric Cervical Spine: Trauma and Anomalies,” Moderator, Instructional Course Lecture, AAOS/POSNA International Pediatric Orthopaedic Symposium, Orlando FL, November 2012.

“Treatment of Cervical Spine Injury / Fixation Techniques,” AAOS/POSNA International Pediatric Orthopaedic Symposium, Orlando FL, November 2012.

“Protecting the Sagittal Plane During Deformity Correction,” AAOS/POSNA International Pediatric Orthopaedic Symposium, Orlando FL, November 2012.

“Adolescent Idiopathic Scoliosis: Early Cases and Key Principles,” Moderator, Instructional Course Lecture, AAOS/POSNA International Pediatric Orthopaedic Symposium, Orlando FL, November 2012.

“State of the Art of Spinal Deformity Correction,” Moderator, Instructional Course Lecture, AAOS/POSNA International Pediatric Orthopaedic Symposium, Orlando FL, November 2012.

“Treatment of Cerebral Palsy Scoliosis,” Instructional Course Lecture, AAOS/POSNA International Pediatric Orthopaedic Symposium, Orlando FL, November 2012.

Course Chairman and Moderator, “The Harms Study Group Presents...Advanced Techniques for AIS Correction with Video Vignettes,” VuMedi Webinar, December 2012.

“Proximal and Distal Junctional Kyphosis after Deformity Surgery: Prevention and Treatment Strategies,” Association of Spinal Surgeons of India 26th Annual Conference, Kochi, India, January 2013.

“3D Evaluation of Adolescent Idiopathic Scoliosis,” Association of Spinal Surgeons of India 26th Annual Conference, Kochi, India, January 2013.

“Sagittal Plane Restoration in AIS,” Association of Spinal Surgeons of India 26th Annual Conference, Kochi, India, January 2013.

Moderator, Spinal Tumors and Infection Scientific Session, Association of Spinal Surgeons of India 26th Annual Conference, Kochi, India, January 2013.

Grand Rounds Presentation / Visiting Professor, Thomas Jefferson University, Philadelphia, PA March 7, 2013

Surgical Technique for Pedicle Anatomy and Screw Insertion, Advanced Spinal Deformity Tutorial, San Diego, CA April 2013

Monitoring of the Intraoperative Surgical Case During: Rod Approximation, Rod Rotation & Vertebral Derotation, Advanced Spinal Deformity Tutorial, San Diego, CA April 2013

Panel discussion & Debate: Ponte Osteotomies should be routing for almost all AIS cases, Advanced Spinal Deformity Tutorial, San Diego, CA April 2013

Case Discussion: Neuromuscular including Sacral Screws, Advanced Spinal Deformity Tutorial, San Diego, CA April 2013

INVITED LECTURESHIPS / COURSE FACULTY: *(continued)*

Faculty: Thoracic Pedicle Screw Insertion Demonstration, Advanced Spinal Deformity Tutorial, San Diego, CA April 2013

Faculty: Posterior Osteotomy Demonstration, Advanced Spinal Deformity Tutorial, San Diego, CA April 2013

Faculty: Sacropelvic Fixation Demonstration, Advanced Spinal Deformity Tutorial, San Diego, CA April 2013

“Inter and Intra-Observer Reliability of the Simplified Skeletal Maturity Scoring System for Scoliosis Progression” An Analysis of 277 Patients; Scoliosis Research Society 48th Annual Meeting; Lyon, France September 16-23, 2013

“The Simplified Skeletal Maturity Method and its Correlation with Curve Progression in Idiopathic Scoliosis” Scoliosis Research Society 48th Annual Meeting; Lyon, France September 16-23, 2013

“A Prospective Multicenter Study of Neuromonitoring for Cerebral Palsy Scoliosis: the Nature and Rate of Alerts and Recovery of Changes” Scoliosis Research Society 48th Annual Meeting; Lyon, France September 16-23, 2013

“Scoliosis Surgery in Children with Congenital Heart Disease” Scoliosis Research Society 48th Annual Meeting; Lyon, France September 16-23, 2013

Faculty, Neuromuscular Scoliosis and Neurodegenerative Adult Spinal Deformity: Pediatric to Adulthood Treatment Techniques, Scoliosis Research Society 48th Annual Meeting; Lyon, France September 16-23, 2013

“The Treatment of Pediatric Neurogenic Deformity: How Do Techniques Differ Around the World”? Steven M. Mardjetko, MD, Alain Dimeglio, MD; Lawrence L. Haber, MD; Suken A. Shah, MD, Scoliosis Research Society 48th Annual Meeting; Lyon, France September 16-23, 2013

“A Global Perspective of the Management of Spinal Disease and Deformity” Scoliosis Research Society 48th Annual Meeting; Lyon, France September 16-23, 2013

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