



**Scope of Practice**

Spinal Endoscopy for cervical/lumbar disk and stenosis pathology  
Pediatric & Adult Spinal Deformity/Scoliosis  
Minimally Invasive Anterior/Lateral/Oblique/Posterior Degenerative & Deformity Spine  
Complex Revision/Redo Spinal Reconstruction  
Spinal Trauma – Full spectrum  
Cervical/Thoracic/Lumbar Degenerative Spine  
Cervical/Thoracic/Lumbar Primary & Metastatic Spinal Column Tumors  
Spinal Injections/Ablations for pain management

**Employer**

Spine & Orthopedic Surgical Institute 05/2017 - present  
Houston, Texas 77054

Springfield Clinic, LLP 09/2013 – 05/2017  
Adult & Pediatric Spinal Deformity Surgeon  
SIU Clinical Assistant Professor of Spinal Surgery  
Springfield, IL 62702

Chief, Adult Spinal Deformity Service 08/2011 – 09/2013  
Assistant Professor of Spinal Surgery  
Division of Orthopaedics & Rehabilitation  
Southern Illinois University  
Springfield, Illinois 62794

**Years in spine practice: 8 years**  
**Years in medicine: 13 years**

**Post-Doctoral Training**

Dr. Lawrence Lenke Complex Adult & Pediatric Spinal Deformity  
Apprenticeship/ Senior Fellowship 08/2013 – 01/2014  
Barnes-Jewish Hospital Washington University Orthopaedics  
St. Louis, MO

Spine Surgery Fellowship 07/2010 – 08/2011  
Barnes-Jewish Hospital Washington University Orthopaedics  
Directors: Keith Bridwell MD & Lawrence Lenke MD  
St. Louis, MO

Chief, Orthopedic Surgery Residency 07/2009 – 07/2010  
New York Presbyterian Hospital-Columbia University  
Columbia University, New York, NY

Orthopedic Surgery Residency  
New York Presbyterian Hospital-Columbia University  
Columbia University, New York, NY

07/2006 – 07/2009

Orthopedic Surgery Internship  
New York Presbyterian Hospital-Columbia University  
New York, NY

06/2005 – 07/2006

### **Surgeon Visitation & Observation for Educational Enhancement**

Dr. Victor Hayes; Spinal Endoscopy	Tampa, FL	2018
Dr. Hirohiko Inanami: Spinal Endoscopy	Tokyo, Japan	2016
Dr. Byllis: Adolescent Scoliosis	Tampa, FL	2016
Dr. Peter Newton: Adolescent Scoliosis	San Diego, CA	2015
Dr. Daniel Sucato: Adolescent Scoliosis	Dallas, TX	2015
Dr. Harry Shufflebarger: Adolescent Scoliosis	Miami, FL	2013
Dr. David Skaggs: Adolescent Scoliosis	Los Angeles, CA	2013

### **Board Certification**

American Board of Orthopaedic Surgery: Board-Eligible (part 1 <i>passed</i> )	07/ 06 /2011
American Board of Orthopaedic Surgery: Board-Certified (part 2 <i>passed</i> )	08/ 19 /2013
American Board of Independent Medical Examiners ( <i>passed</i> )	11/ 17/ 2015

### **State Medical Licenses**

Texas	R1277	(active)	01/06/2017
Illinois	128400	(inactive)	07/08/2011
Missouri	2010011562	(inactive)	04/13/2010
New York	245262	(Inactive)	07/19/2007

### **Hospital Privileges**

Memorial Hermann Southeast	Houston, TX
Hermann Drive Surgical Hospital	Houston, TX
1 <sup>st</sup> Street Surgical Hospital	Houston, TX
Memorial Medical Center;	Springfield, IL
St. John's Hospital;	Springfield, IL
St. Mary's Hospital;	Decatur, IL
Abraham Lincoln Memorial Hospital	Lincoln, IL

### **Education**

Healthcare Leadership: Change Leadership Certificate <i>Cornell University; College of Human Ecology</i>	09/2016 - present
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Doctorate of Medicine with Honors and Distinction in Research <i>University of Rochester School of Medicine &amp; Dentistry; Rochester, NY</i>	08/2000 – 05/2005
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Humanities, GPA 4.0 <i>University of Pittsburgh</i> ; International Semester Abroad	09/1999 – 12/1999
B.S. Chemistry, Summa Cum Laude <i>Florida A &amp; M University</i> ; Tallahassee, Florida	08/1996 – 05/ 2000
B.S. Chemistry, GPA 3.9 <i>Hampton University</i> ; Hampton, Virginia	05/1995 - 05/1996

**Honors/Awards**

1. Voted Best Faculty Instructor PASE Cervical Spine	2012
2. Alpha Omega Alpha (AOA) Medical Honor Society	2004
3. Bristol-Myers Squibb Academic Medicine Fellow	2004
4. Process of Discovery Award	2004
5. Wilbert C. Jordan Research Forum Basic Science Award 1 <sup>st</sup> place	2004
6. Dean's Scholarship	2003
7. Wilbert C. Jordan Research Forum Basic Science Award 1 <sup>st</sup> place	2003
8. Whipple Scholarship	2000

**Memberships**

Cervical Spine Research Society (CSRS)	2018
International Intradiscal Therapy and Transforaminal Spine Society (IITTSS)	2016
Scoliosis Research Society (SRS) – Fellow Member	2013
Spine Intervention Society (SIS)	2012
American Academy of Orthopaedic Surgeons (AAOS)	2011

**Research Grants**

1. OREF- Orthopaedic Research Education Foundation Resident Grant	2008
2. Carroll Orthopaedic Science and Research Foundation Grant	2007
3. OME Research Grant	2002
4. American Medical Association Seed Grant	2002

**Other Awards/Accomplishments**

Keynote Address - Speaker Annual White Coat Ceremony University of Rochester School of Medicine & Dentistry	2004
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**Invited Speaker & Course Faculty**

Global Spine Outreach 5 <sup>th</sup> annual Spinal Deformity Symposium CHRISTUS MUGUERZA Hospital Alta Especialidad Monterrey, Nuevo Leon, Mexico	2018
National Medical Association Update of Cervical Radiculopathy Rosen Creek Shingle Convention Orlando, FL	2018
Global Spine Outreach 3 <sup>rd</sup> annual Spinal Deformity Symposium Club de Industriales, Mexico City	2016

Which Operation is best for foraminal disk? Defend ACDF New York Orthopaedic Hospital 75 <sup>th</sup> Biennial Meeting; 150 <sup>th</sup> Anniversary New York, New York	2016
Faculty Spinal Deformity Live St. Louis, MO	2014
Faculty Instructor The 20 <sup>th</sup> Advanced Techniques in Cervical Spine Decompression and Stabilization St. Louis, MO	2013
Faculty Instructor The 18 <sup>th</sup> Advanced Techniques in Cervical Spine Decompression and Stabilization. St. Louis, MO <i>***voted "Most Outstanding Faculty" by the participants.</i>	2012
Faculty Instructor Current and Emerging Issues in Complex Lumbar Spine Surgery St. Louis, MO	2010

### **Volunteer History**

SpineHope – <b>Cali, Colombia</b> scoliosis medical mission	04/2016 – 05/2016
FOCOS- <b>Accra, Ghana</b> Complex Spine Surgery medical mission	11/2009 - 12/2009
Admissions Committee Member	08/2002 – 08/2003
Student National Medical Association President	08/2000 – 05/2005
Surgery Interest Group Vice-President	08/2000 – 05/2005

### **Research Experience**

New York Presbyterian Hospital-Columbia University; New York, NY Orthopaedic Research Education Foundation Resident Grant (\$5,500) Carroll Orthopaedic Science and Research Foundation Grant (\$30,000) “The Effect of Ovariectomy-Induced Estrogen Deficiency in Accelerating Greater Tuberosity Osteopenia and Supraspinatus Tendon-to-Bone Healing at the Footprint in a Rat Model” Mentor: Dr. Christopher S. Ahmad	06/2007 – 12/2009
University of Rochester Musculoskeletal Research Center; Rochester, NY Honor Research Fellow & Bristol-Myers Squibb Academic Medicine Fellow “The Role of Interleukin-1 in Particle Mediated Inflammatory Bone Loss” Mentor: Dr. Regis O’Keefe	06/2002 - 07/2003
Pfizer, Inc. Research and Development; Groton, CT Organic Synthesis Research Intern Area of Study: Macrolide side chain substituents Mentor: Dr. Yong-Jin Wu	06/1998 – 08/1998
Pfizer, Inc. Research and Development; Groton, CT	06/1999 – 08/1999

Drug Metabolism Research Intern  
Area of Study: Rat Liverbeads  
Mentor: Dr. David Duignan

### **Publications/Presentations/ Poster Sessions**

Book chapter: Cervical Corpectomy 2018

A resident's guide to Spinal Surgery

Legal Implications and Strategies. In: Bridwell KH, ed: The Textbook of Operative Spine Surgery 4th edition. Lippincott Williams and Wilkins, Philadelphia, PA, Chapter ,  
**Rahman RK**

#### **\*Rare complications of cervical spine surgery: Horner's syndrome**

*Global Spine Journal 2017 vol 7 Issue 1\_ supplement*

Vincent C. Traynelis, MD; Hani R. Malone, MD; Zachary A. Smith, MD; Wellington K. Hsu, MD; Adam S. Kanter, MD; Sheeraz Qureshi, MD; Samuel K. Cho, M.D; Evan O. Baird, MD; Robert Isaacs, MD; **Ra'Kerry Rahman, MD**; Galina Polevaya PA; Justin S. Smith, MD, PhD; Christopher Shaffrey, MD; P. Justin Tortolani, MD; D. Alex Stroh, MD; Paul Arnold, M.D., FACS; Michael G. Fehlings MD PhD; Thomas E. Mroz, MD; K. Daniel Riew, MD

#### **\*Anterior Cervical Infection: Presentation, Incidence and Management**

*Global Spine Journal 2017 vol 7 Issue 1\_ supplement*

James Harrop, MD; George M. Ghobrial, MD; Rick C. Sasso MD; Chadi A Tannoury, MD; Tony Tannoury, MD; Zachary A. Smith, MD; Wellington K. Hsu, MD; Paul Arnold, M.D., FACS; Michael G. Fehlings MD PhD; Thomas E. Mroz, MD; Anthony F. De Giacomo, MD; Bruce C. Jobse, BA; **Ra'Kerry Rahman, MD**; Sara Thompson, MS; K. Daniel Riew, MD

#### **\*Misplaced Cervical Screws Requiring Re-Operation**

*Global Spine Journal 2017 vol 7 Issue 1\_ supplement*

Jeremy Peterson, MD; Paul Arnold, M.D., FACS; Zachary A. Smith, MD; Wellington K. Hsu, MD; Michael G. Fehlings MD PhD; Robert Hart, MD; Alan Hilibrand, MD; Ahmad Nassr, MD; **Ra'Kerry Rahman, MD**; Chadi A Tannoury, MD; Tony Tannoury, MD; Thomas E. Mroz, MD; Bradford L. Currier, MD; Anthony F. De Giacomo, MD; Jeremy L. Fogelson, MD; Bruce C. Jobse, BA; Eric M. Massicotte MD, MSc, FRCSC; K. Daniel Riew, MD

#### **\*Esophageal Perforation Following Anterior Cervical Spine Surgery: Case Report and Review of the Literature**

*Global Spine Journal 2017 vol 7 Issue 1\_ supplement*

Stuart H. Hershman, MD; William Aaron Kunkle, DO; Michael P Kelly, MD, MSc; Jacob M. Buchowski, MD, MS; Wilson Z. Ray, MD; David Bumpass, MD; Jeffreery L. Gum, MD; Colleen M. Peters, MA; Weerasak Singhatanadgige, MD, MS; Jin Young Kim, MD; Zachary A. Smith, MD; Ahmad Nassr, MD; Bradford L. Currier, MD; **Ra'Kerry Rahman, MD**; Robert Isaacs, MD; Justin S. Smith, MD, PhD; Christopher Shaffrey, MD; Sara Thompson, MS; Jeffrey C. Wang, MD; Elizabeth L. Lord, MD; Zorica Buser, PhD; Paul Arnold, MD, FACS; Michael G. Fehlings MD PhD; Thomas E. Mroz, MD; K. Daniel Riew, MD

Adult Degenerative Scoliosis: Determination of Fusion and Decompression Parameters:

Sagittal alignment as a predictor of clinical adjacent segment pathology requiring surgery after anterior cervical arthrodesis. Spine J. 2014 Jul 1;14(7):1228-34.

Park MS, Kelly MP, Lee DH, Min WK, **Rahman RK**, Riew KD.

A Comparison of TLIF With rhBMP-2 vs. No TLIF and Higher Posterolateral rhBMP-2 Dose At L5-S1 For Long Fusions To The Sacrum With Sacropelvic Fixation In Primary Adult Deformity Patients. Spine (Phila Pa 1976). 2013 Oct 9.

**Rahman RK**, Buchowski JM, Stephens B, Dorward IG, Koester LA, Bridwell KH.

Significant change or loss of intraoperative monitoring data: a 25-year experience in 12,375 spinal surgeries. Spine (Phila Pa 1976). 2013 Jan 15; 38(2):E101-8.

Raynor BL, Bright JD, Lenke LG, **Rahman RK**, Bridwell KH, Riew KD,  
Buchowski JM, Luhmann SJ, Padberg AM.

Surgical treatment of C3 and C4 cervical radiculopathy. Spine (Phila PA 1976). 2013 Jan 15;38(2): 112-8. Park MS, Kelly MP, Min WK, **Rahman RK**, Riew KD

High Dose Tranexamic Acid(TXA) Reduces Blood Loss in Complex Pediatric Deformity Spine Surgery  
Manuscript submitted.

**Rahman RK**, Lenke LG, Zebala LP, Bridwell KH, Luhmann SJ, Sides, BA.

Elbow medial collateral ligament injuries. Curr Rev Musculoskelet Med. 2008 Dec;1(3-4):197-204.  
PMID:19468906. **Rahman RK**, Levine WN, Ahmad CS.

Improving bone density at the rotator cuff footprint increases supraspinatus tendon failure stress in a rat model. J Orthop Res. 2010 Mar;28(3):308-14

Cadet ER, Vorys GC, **Rahman RK**, Park SH, Gardner TR, Lee FY, Levine WN, Bigliani LU,  
Ahmad CS.

Comparative analysis of two thoracic kyphogenic posterior segmental spinal instrumented fusion techniques in adolescent idiopathic scoliosis. Manuscript in progress

**Ra'Kerry Rahman**, Oheneba Boachie-Adjei, Jean-Luc Clements, Samuel Cho, Tom Cha,  
Yongjung J Kim

Sagittal Alignment As a Predictor of Adjacent Segment Disease After Anterior Cervical Arthrodesis.  
Cervical Spine Research Society (CSRS) Park MS; Kelly, MP; Lee, DH; Min, WK;

Rahman, RR; Riew, KD. Podium Presentation. Scottsdale, AZ. 11/2011

Lumbar spinal stenosis. Current Opinion in Orthopaedics. August 2008 - Volume 19 - Issue 4

**Rahman RK**, Nowak DD, Ludwig SL.

Classification of Spondylolisthesis In: Bridwell KH, ed: The Textbook of Operative Spine Surgery 3<sup>rd</sup> edition. Lippincott Williams and Wilkins, Philadelphia, PA, Chapter 34,

**Rahman RK**, Weidenbaum M, Perra JH

Subaxial Posterior Foraminotomy. In: Bridwell KH, ed: The Textbook of Operative Spine Surgery 3<sup>rd</sup>

edition, Lippincott Williams and Wilkins, Philadelphia, PA, Chapter 34,  
Nowak DD, **Rahman RK**, Ludwig SL

Posttraumatic arthritis of the cervical spine: Operative and nonoperative management. In Ludwig SL, Poelstra KA, eds: Arthritis and Arthroplasty: The Spine, Elsevier, Philadelphia, PA, Chapter 15, Nowak DD, **Rahman RK**, Ludwig SL.

### Abstracts

\*\* = podium presentation

\*\* Does Planned Staging for Posterior-only Vertebral Column Resections in Spinal Deformity Surgery Increase Perioperative Complications? Gum JL, Lenke LG, Bridwell KH, Zhao J, Bumpass DB, Sugrue PA, Karikari IO, **Rahman RK**, Carreon LY. Accepted for Presentation, International meeting on Advanced Spine Technologies, Valencia, Spain, July 10-13, 2014

\*\*Are TLIFs necessary for L5-S1 arthrodesis in long constructs to the sacrum/pelvis in primary adult deformity patients? Rahman, RK; Bridwell, KH; Lenke LG; Dorward, I; Stephens, B; and Koester, L

\*\*Efficacy of High-Dose Tranexamic Acid for Complex Pediatric Spinal Deformity Rahman RK, Lenke LG, Bridwell KH, Nakamura Y, Min W, Cole J, Zebala L, and Sides B

\*\* Intrawound Vancomycin Powder lowers the acute deep wound infection rate in adult spinal deformity patients Rahman RK, Aleem A, Lenke LG, Bridwell KH, and Sides B.

\*\*Significant change or loss of Intraoperative Monitoring Data: A 25 year experience in 12,375 Spinal Surgeries Raynor, BL; Bright, JD; Rahman, RK ;Lenke, LG; Bridwell, KH; Riew, KD; Buchowski, JM; Luhmann, SJ; and Padberg, AM

\*\*The Role of Interleukin-1 in Particle Mediated Inflammatory Bone Loss. Bristol-Myers Squibb Research Symposium Oral Presentation & Abstract: 03/2004  
**Ra’Kerry Rahman**, Edward Schwarz and Regis O’Keefe

The Stage Dependent Effects of Interleukin-6 on Osteoclastogenesis. American Society of Bone and Mineral Research 25<sup>th</sup> Annual Meeting Poster Presentation & Abstract: 09/2003  
**Ra’Kerry Rahman**, Susan V. Bukata, Jill Gelinias, Willis Huang, J. Edward Puzas, Randy N. Rosier, Edward Schwarz and Regis O’Keefe

Qualitative Measures and New Approaches for Increasing Throughput of Clearance Predictions Utilizing Rat Liverbeads<sup>TM</sup> Assay. The Society for Biomolecular Screening 8<sup>th</sup> Annual Conference & Exhibition. Poster Presentation & Abstract: 09/2002  
Diana Sahakian, Geng Gao, **Ra’Kerry Rahman**, Katrina Rogers, Rebecca Kelly, Dan Meyer, David Duignan, and Robert Polzer Pfizer

### Poster presentation

Posterior Vertebral Column Resection: Complications and Clinical Outcomes with minimum 5-year follow-up. **Rahman RK**, Lenke LG, Raja-Rahman NR, Gum JL  
SRS Poster 2013

High Dose Tranexamic Acid Reduces Blood Loss in Complex Pediatric Deformity Surgery  
IMAST 2011 Copenhagen, Denmark

### Courses

Endoscopic Spine Surgery Hands-On Workshop on April 23 <sup>rd</sup> at Prima Vista Richard Wolf Academy, Vernon Hills, IL Instructor: James Yue MD	2016
(ISIS) Lumbar Procedures Bio-Skills Lab (Science Care). Phoenix, AZ	1/2013
Cervical Spine Research Society (CSRS) 17 <sup>th</sup> Instructional Course: Surgical Techniques, Cervical Arthroplasty, Cranial Vertebral Junction, Complications. Chicago, IL	12/2012
Cervical Spine Research Society (CSRS) 16 <sup>th</sup> Instructional Course: Surgical Techniques, Tumor, Trauma & Quality and Value in Cervical Surgery. <b>Podium Presentation as co-author.</b> Scottsdale, AZ	11/2011
46 <sup>th</sup> Scoliosis Research Society Annual Meeting & Course. <b>**4 Podium Presentations**</b>	09/2011
ONE Spine Seattle, WA	08/2010
Principles and Treatment of Spinal Disorders for Residents and Fellows. AO North America Las Vegas, NV	05/2010
Residents and Fellows Spine Forum AO spine TRIA Orthopaedic Center Bloomington, MN	04/2010
ASES International Shoulder Symposium New York, NY	10/2009
Advanced Microsurgery Course Microsurgery Research & Training Laboratory Columbia University Medical Center New York, NY	10/2009
Basic Microsurgery Course Microsurgery Research & Training Laboratory Columbia University Medical Center New York, NY	01/2007
Principles and Treatment of Spinal Disorders for Residents and Fellows. AO North America	11/2007



Las Vegas, NV

Principles and Treatment of Spinal Deformity.  
Ft. Lauderdale, FL

12/2007

Modern Techniques in Spine Surgery. Montefiore Medical Center  
Bronx, NY

11/2007

Principles and Treatment of Cervical Spine Trauma.  
Denver, CO

10/2007

Basic Principles and Techniques of Operative Fracture Management for Residents.  
AO North America  
Atlanta, GA

05/2007

Basic Trauma Course. Annual Boston Orthopaedic Trauma Symposium.  
Boston, MA

10/2005