

Paul D. Kim, MD

Personal Information:

Date of Birth: November 5, 1976

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Business Address:

Spine Institute of San Diego

6719 Alvarado Rd. #308

San Diego, CA 92120

Education

The Spine Institute, Saint John's Health Center and Cedars-Sinai Medical Center, Los Angeles, CA

- 2010-2011 Spine Surgery Fellow

Columbia University Medical Center, New York Orthopedic Hospital, New York, NY

- 2009-2010 Chief Resident
- 2005-2009 Orthopedic Surgery Resident
- 2004-2005 Harrison McLaughlin Orthopedic Research Fellow

Columbia University, College of Physicians & Surgeons, New York, NY

- 2000-2004 Medical Degree

Harvard University, Graduate School of Arts & Sciences, Cambridge, MA

- 1998-2000 Graduate Student, Ph.D. Program in Organismic & Evolutionary Biology

Cornell University, College of Arts & Sciences, Ithaca, NY

- 1994-1998 B.A. cum laude in College Scholar with concentration in Marine Biology

Woodbridge High School, Irvine, CA

- 1990-1994 Graduated with honors

Certification

American Board of Orthopedic Surgery, Board-Certified, 2013

United States Medical Licensing Examination (USMLE) Steps 1,2,3: Passed

California Qualified Medical Examiner, April 2011

Medical Licensure

California

New York State (inactive)

Professional Societies

Fellow, American Academy of Orthopaedic Surgeons (AAOS)

Diplomat, American Board of Orthopedic Surgeons (ABOS)

Korean-American Spine Society

Hospital Privileges/Committees

Advanced Surgery Center of North County, Escondido, CA

Alvarado Hospital, San Diego, CA

- Chairman of Orthopedic Surgery, 2017- 2019

Scripps Memorial Hospital, La Jolla, CA

Sharp Memorial Hospital, San Diego, CA

Sharp Grossmont Hospital, La Mesa, CA

Palomar Medical Center, Escondido, CA

Honors and Awards

•2010 Franch E. Stinchfield Award for Excellence in Orthopedic Surgery, New York Orthopedic Hospital

•2008 1st Place Poster Presentation. Orthopedic Research and Education Foundation (OREF), New York

Metropolitan Area Resident Research Competition. New York, NY. May 2008.

•2008 Robert E. Carroll Orthopedic Scientific Research Foundation Grant, \$10,000 Co-investigator: Percutaneous trans-facet fixation of the lumbar spine

•2005 Robert E. Carroll Orthopedic Scientific Research Foundation Grant, \$10,000 Co-principal Investigator: Bio-absorbable implants in peripheral nerve surgery

•2005 2nd Place Podium Presentation. Orthopedic Research and Education Foundation (OREF), New York

Metropolitan Area Resident Research Competition. New York, NY. May 2005.

•2001 National Institutes of Health (NIH) Summer Research Fellowship, Columbia University

- 1999-2004 National Science Foundation Pre-doctoral Fellowship Grant, Harvard University
- 1998-1999 National Institutes of Health (NIH) Genetics Training Grant, Harvard University
- 1998 Phi Beta Kappa, Cornell University
- 1997 Phi Kappa Phi, Cornell University
- 1997 Howard Hughes Medical Institute Undergraduate Research Scholar, NOAA station, Key Largo, FL
- 1996 Howard Hughes Medical Institute Undergraduate Research Scholar, Shoals Marine Laboratory, NH
- 1994-1998 Cornell College Scholar (Honors Independent Study Major), Cornell University
- 1994-1997 Dean's List, Cornell University
- 1994-1998 National Merit Special Scholarship, Cornell University
- 1994 William T. Keeton Prize in Introductory Biology (top student in class of 800), Cornell University
- 1994 Woodbridge High School Top Male Scholar-Athlete, Track & Field

Publications

Peer-Reviewed Journals

R Raiszadeh, K Raiszadeh, L Eaton, PD Kim, C Kim, Choll. 2020. Effectiveness of combined magnetic field bone growth stimulation on lumbar spinal fusion outcomes: a single center retrospective analysis comparing combined magnetic field to no-stimulation. *International Journal of Research in Orthopaedics*. Volume 6.

PD Kim, R Raiszadeh, CW Kim, E Keh, P Durr, G Perelson, J Jenrette, K Raiszadeh. Cost-effectiveness of a focused strengthening program supervised by spine surgeons. *Manuscript in Preparation*.

J Sclafani, K Raiszadeh, R Raiszadeh, PD Kim, K Liang, S. Gill, CW Kim. 2015. Validation and Analysis of a Multi-site MIS Prospective Registry Through Sub-analysis of an MIS TLIF Subgroup. *International Journal of Spine Surgery*. 18(4).

PD Kim, EM Baron, M Levesque. 2012. Extrusion of expandable stacked interbody device for lumbar fusion: case report of a complication. *Spine*. April 11 (Epub ahead of print).

JK Lee, J Gomez, PD Kim, DP Roye, MG Vitale. 2011. "Growth Friendly" Spine Surgery: Treatment options for the young child with scoliosis. *Journal of American Academy of Orthopedic Surgery (JAAOS)* 19: 722-727.

J Lester, K Boselli, PD Kim, CS Ahmad. 2010. Isolated tear of teres major tendon. *Orthopedics* 33(11): 847.

PD Kim, A Hayes, F Amin, Y Akelina, A Hays, MP Rosenwasser. 2010. Collagen nerve protectors in rat sciatic nerve repair: a morphometric and histological analysis. *Microsurgery* 30(5): 392-6.

PD Kim, S Ludwig, K Poelstra, B Duggan, T Scalea, D Gelb. 2010. Ectopic bone formation in the pelvis after combined anterior and posterior fusion in the spine. *Journal of Spinal Disorders & Techniques* 23(3): 215-220.

BW Su, PD Kim, T Cha, J Lee, E April, M Weidenbaum, A Vaccaro. 2009. An anatomical study of the mid-lateral pars relative to the pedicle footprint in the lower lumbar spine. *Spine* 34(13): 1355-62.

BW Su, T Cha, PD Kim, J Lee, E April, M Weidenbaum, T Albert, A Vaccaro. 2009. An anatomic and radiographic study of lumbar facets relevant to percutaneous transfacet fixation. *Spine* 34(11): E384-90.

PD Kim, KA Poelstra. 2008. Update on the management of axial neck pain, cervical radiculopathy and myelopathy. *Current Orthopaedic Practice* 19(4): 425-429.

L Chen, PD Kim, CS Ahmad, WN Levine. 2007. Medial collateral injuries of the knee: current treatment concepts. *Current Reviews in Musculoskeletal Medicine* 1(2): 108-113.

BE Heyworth, JH Lee, PD Kim, CB Lipton, RJ Strauch, MP Rosenwasser. 2008. Hylan versus corticosteroid versus placebo for treatment of basal joint arthritis: a prospective, randomized, double-blinded clinical trial. *Journal of Hand Surgery (Am)* 33(1): 40-48.

MW Grafe, PD Kim, MP Rosenwasser, RJ Strauch. 2007. Author Reply Letter to the Editor. Wrist denervation and the anterior interosseous nerve: anatomic considerations. *Journal of Hand Surgery (Am)* 32(3):414.

AG Hayes, PD Kim, F Amin, CM Jobin, Y Akelina, AP Hays, MP Rosenwasser. 2006. Collagen nerve protectors in rat sciatic nerve repair: a morphometric and histologic analysis. *Abstract Supplement to Plastic and Reconstructive Surgery* 118(4) Supplement: 100-101.

PD Kim, MW Grafe, MP Rosenwasser. 2005. Elbow stiffness: etiology, treatment, and results. *Journal of American Society for Surgery of the Hand*. 5(4): 209-216.

MW Grafe, PD Kim, MP Rosenwasser, RJ Strauch. 2005. Wrist denervation and the anterior interosseous nerve: anatomic considerations. *Journal of Hand Surgery (Am)* 30(6): 1221 –1225.

MW Grafe, PD Kim, MP Rosenwasser. 2005. Arthritis of the wrist: an overview. *Orthopedics Hyperguide online tutorial*.

R Anderson, JB Elder, MD Brown, CE Mandigo, AT Parsa, PD Kim, P Senatus, DE Anderson, and JN Bruce. 2002. Changes in the immunologic phenotype of human malignant glioma cells after passaging in vitro. *Clinical Immunology* 102(1) 84-95.

J Cui, G Jander, LR Racki, PD Kim, NE Pierce, FM Ausubel. 2002. Signals involved in Arabidopsis resistance to *Trichoplusia ni* caterpillars induced by virulent and avirulent strains of the phytopathogen *Pseudomonas syringae*. *Plant Physiology* 129: 551-564.

K Kim, CD Harvell, PD Kim, GW Smith, and SM Merkel. 2000. Role of secondary chemistry in fungal disease resistance of sea fans (*Gorgonia* spp.). *Marine Biology* 136: 259-267.

K Kim, PD Kim, AP Alker, and CD Harvell. 2000. Chemical resistance of gorgonian corals against fungal infections. *Marine Biology* 137: 393-401.

D Pimentel, O Bailey, PD Kim, E Mullaney, J Calabrese, L Walman, F Nelson, X Yao. 1999. Will humans force "nature" to control their numbers within the limits of the earth's resources? *Environment, Development and Sustainability* 1: 98-116.

Book Chapters

PD Kim, B Su, A Vaccaro. *The Spine: Medical and Surgical Management*. 1st edition. Open operative treatment of lumbar disc herniations. A Vaccaro, B Su, etc. 2017

PD Kim, CW Kim. Chapter 59: Minimally invasive technology for lumbar motion preservation. *Dynamic Stabilization of the spine*. DH Kim, D Sengupta, F Cammisa, R Fessler, DH Yoon, editors. 2015.

PD Kim, CW Kim. Chapter 3: Philosophy and biology of minimally invasive spine surgery. *Minimally invasive spine surgery: surgery techniques and disease management*. F Phillips, I Lieberman, D Polly, editors. 2014.

PD Kim, H Bae. *Lumbar Spinal Stenosis*. *Spine Surgery Basics*. Vikas Patel, editor. 2014.

PD Kim, H Bae. *Cervical Laminoplasty*. *Atlas of Operative Techniques in Spinal Surgery 2nd Edition*.

PD Kim, R Delamarter. Chapter 8: Anterior Cervical Disc Arthroplasty. *Atlas of Operative Techniques in Spinal Surgery 2nd Edition*.

PD Kim, R Delamarter. Video Chapter: Lumbar Disc Arthroplasty. Atlas of Operative Techniques in Spinal Surgery 2nd Edition.

EV Pablo, PD Kim, DG Sueki, R Delamarter, J Huffman. 2010. Chapter 12: Anterior cervical discectomy and fusion. Rehabilitation for the Post Surgical Orthopedic Patient.

PD Kim, S Ludwig, K Poelstra. 2009. Chapter 52: Expanded indications for the use of minimal incision surgery spinal instrumentation. Arthritis and Arthroplasty: The Spine. In preparation.

PD Kim, N Raizman, MW, MP Rosenwasser. 2008. Chapter: Implants in the shoulder girdle. Orthopedic Implants: Applications, Complications and Management. Eds. Ronald Lindsey & Zbigniew Gugala. In press.

MW Grafe, PD Kim, Rosenwasser MP. 2006. Chapter 12: Distal radius fractures: external fixation. Master Techniques in Orthopaedic Surgery: Fractures. Don Wiss, editor.

Presentations

PD Kim. Robotic spine surgery. November 2020. Palomar Medical Center Virtual Class.

PD Kim. 14th Annual Korean American spine society. July 2019. Vancouver. Why Expandable MIS TLIF is better.

PD Kim. 6th Annual Winter Spine Symposium. MIS TLIF: clinical update and early data; Cervical disc injuries in athletes; Clinical product update on Vibone Bone Matrix. December 2018. New York, NY.

PD Kim. 15th Annual State of Spine Surgery Think Tank Meeting. June 2018. Aruba. MIS TLIF: early evidence.

PD Kim. 13th Annual Korean American spine society. July 2018. Napa, CA. Cervical myelopathy

PD Kim. Ministry of Health, Uzbekistan. Master Class: Modern minimally invasive spine surgery in degenerative disc disease. October 2, 2017. Tashkent, Uzbekistan.

PD Kim. Ministry of Health, Uzbekistan. Master Class: Kyphoplasty role in spinal pathological fractures. October 2, 2017. Tashkent, Uzbekistan.

PD Kim. 14th Annual Cabo Meeting: State of spine surgery. June 2017. SISD early data: Expandable cage technology. San Jose del Cabo, Mexico.

PD Kim. 12th Annual KASS meeting. MIS Posterior foraminotomy. June 2017. Maui, Hawaii.

PD Kim. 3rd Annual Orthopedic and Spine Symposium. Disc replacement surgery. Palomar Health. September 2016. Escondido, CA

PD Kim. 2016 San Diego Spine Foundation Visiting Professorship annual meeting. Friday, July 29, 2016 Scripps Green Hospital. Faculty. MIS TLIF vs LLIF Debate.

PD Kim. 11th Annual KASS Meeting. MIS Posterior foraminotomy. July 2016. Palos Verdes, CA.

PD Kim. 2nd Annual Orthopedic and Spine Symposium. Minimally invasive spine surgery. Palomar Health. October 2, 2015. Escondido, CA

PD Kim. 10th Annual KASS Meeting. Panel Faculty Multi-level cervical stenosis. July 2015. Palos Verdes, CA.

PD Kim. Grand Rounds CME Conference: Palomar Medical Center. February 13, 2015. Escondido, CA

PD Kim. Cervical Case Complications. KASS 9th Annual Meeting. June 2014. Santa Monica, CA.

PD Kim. Common Spine Problems and postoperative care. Palomar Medical Center Nursing Education. Escondido, CA. April 2012.

PD Kim. Minimally invasive spine surgery and selected cases. Arch Health Partners CME. Poway, CA February 2012.

PD Kim. Common spine conditions and minimally-invasive spine surgery. Community Talk. Pomerado Hospital. Poway, CA February 2012.

PD Kim, K Raiszadeh. Case report of sagittal imbalance correction with minimally invasive hyperlordotic grafts. San Diego City Wide Spine Conference. La Jolla, CA.

PD Kim, T Day, L Kanim, A Rasouli, H Bae, M Kropf, RB Delamarter. Early Results from One Site USA FDA Trial Clinical Trial Comparing Two Artificial Disc Replacement Devices for the Treatment of Single Level Lumbar Disc Disease. 6th Annual Korean American Spine Society Meeting. Rancho Palos Verdes, CA July 2011.

PD Kim. Cervical Burst Fracture Treatment. Cedars-Sinai Medical Center Spine Conference. Los Angeles, CA September 2010.

PD Kim. Lumbar Disc Replacement Revision. Cedars-Sinai Medical Center Spine Conference. Los Angeles, CA October 2010.

PD Kim. Cervical Facet Fractures. Cedars-Sinai Medical Center Spine Conference. Los Angeles, CA December 2010.

PD Kim. Minimally invasive approach lateral approach to the lumbar spine: anatomy and technique. 5th Annual Korean American Spine Society Meeting. Washington D.C., July 2010.

PD Kim. Percutaneous pedicle screw fixation for trauma. The 1st International Spine Meeting of Khanh Hoa General Hospital. Nha Trang City, Khanh Hoa Province, Vietnam, December 5, 2009.

PD Kim. Fixation strategies in the adult osteoporotic spine. The 15th Annual Meeting of the Spine Society of Ho Chi Minh City, Vietnam. Ho Chi Minh City, Vietnam, December 4, 2009.

YJ Kim, O Boachie-Adjei, K Bridwell, L Lenke, YB Kim, S Cho, PD Kim. Selection of proximal fusion level in adult lumbar segmental instrumented fusion to L5 or S1 for degenerative lumbar scoliosis. The 25th Annual NASS meeting. San Francisco, CA, November 2009.

YJ Kim, L Lenke, K Bridwell, O Boachie-Adjei, PD Kim, YB Kim. Comparative analysis of sagittal plane measures following three different posterior segmental spinal instrumented fusion of AIS. The 44th Annual Scoliosis Research Society meeting, San Antonio, TX, September 2009.

BW Su, T Cha, PD Kim, J Lee, E April, M Weidenbaum, T Albert, A Vaccaro. An anatomic and radiographic study of lumbar facets relevant to percutaneous transfacet fixation. Annual Meeting of the American Academy of Orthopaedic Surgeons. Las Vegas, NV, February 2009.

PD Kim, C Fischer, J Lee, C Katcherian. Perilunate Injuries. New York Orthopaedic Hospital Grand Rounds. New York, NY, October 2008.

M Weidenbaum, PD Kim. Spinal deformity and bone quality. 15th International Meeting on Advanced Spine Techniques (IMAST). Hong Kong, July 2008.

M Weidenbaum, PD Kim. Adult Scoliosis: is anterior column support necessary? DePuy Deformity Summit. Miami, FL, April 2008.

PD Kim, P Mehta, T Cha, S Shamash. Kienbock's disease: etiology, classification and treatment. New York Orthopaedic Hospital Grand Rounds. New York, NY, February 2008.

PD Kim. Tumor Board: renal osteodystrophy. New York Orthopedic Hospital Grand Rounds. New York, NY, July 2007.

MP Rosenwasser, CM Jobin, E Rizzotto, L Chen, PD Kim. Botulinum toxin-A injections during contracture release for post-traumatic elbow stiffness. Closed Annual Meeting, American Shoulder and Elbow Surgeons. Chicago, IL, September 13, 2006.

AG Hayes, PD Kim, F Amin, CM Jobin, Y Akelina, AP Hays, RJ Strauch, MP Rosenwasser. Collagen nerve protectors in rat sciatic nerve repair: a morphometric and histologic analysis. New York Society for Surgery of the Hand: Residents & Fellows Night. New York, NY, May 2006.

CM Jobin, L Chen, E Rizzotto, PD Kim, MP Rosenwasser. Intraoperative injection of botulinum toxin-A during capsular release for post-traumatic elbow stiffness. 4th Annual New York State Orthopaedic Symposium. New York, NY, October 2005.

BE Heyworth, J Lee, PD Kim, BW Su, S Crow, RJ Strauch, MP Rosenwasser. Synvisc versus placebo for treatment of basal joint arthritis: a prospective, randomized, double-blinded, placebo-controlled clinical trial. American Society for Surgery of the Hand, San Antonio, TX, September 2005.

N Raizman, PD Kim, MP Rosenwasser. Prospective, randomized trial of external fixation vs. locking plates. American Society for Surgery of the Hand, San Antonio, TX, September 2005.

PD Kim. Synvisc versus placebo for treatment of basal joint arthritis: a prospective, randomized, double-blinded, placebo-controlled clinical trial. New York Orthopedic Hospital Grand Rounds. New York, NY, June 2005.

PD Kim, L Chen, N Raizman, T Protopsaltis, MP Rosenwasser. Botox in elbow capsular releases. New York Society for Surgery of the Hand: Residents & Fellows Night. New York, NY, May 2005.

MW Grafe, PD Kim, MP Rosenwasser, RJ Strauch. Anatomic study of the anterior interosseous nerve in the forearm. New York Society for the Surgery of the Hand (NYSSH) Residents and Fellows Night. New York, NY, May 2005.

L Chen, PD Kim, T Protopsaltis, S Crow, MP Rosenwasser. Intraoperative botulinum toxin-A for prevention of post-traumatic elbow stiffness. Orthopaedic Research and Education Foundation, New York Metropolitan Area Resident Research Competition. New York, NY, May 2005. 2nd place award for clinical research.

PD Kim, L Chen, N Raizman, T Protopsaltis, MP Rosenwasser. Botox in elbow capsular releases. Orthopaedic Research and Education Foundation, New York Metropolitan Area Resident Research Competition. New York, NY, May 2005.

L Chen, PD Kim, T Protopsaltis, J. Lee, MP Rosenwasser. Intraoperative botulinum toxin-A for prevention of post-traumatic elbow stiffness. Brussels International Symposium on Impaired Motion of the Upper Limb (Palsy, Spasticity, Dyskinesia, and Contractures). Brussels, Belgium, March 2005.

L Chen, PD Kim, T Protopsaltis, S Crow, MP Rosenwasser. Intraoperative botulinum toxin-A for prevention of post-traumatic elbow stiffness. American Society for Shoulder and Elbow Surgery Specialty Day lecture at American Academy of Orthopaedic Surgeons (AAOS). Washington D.C., February 2005.

L Chen, PD Kim, T Protopsaltis, S Crow, MP Rosenwasser. Intraoperative botulinum toxin-A for prevention of post-traumatic elbow stiffness. American Society for Shoulder and Elbow Surgery Closed Meeting. New York, NY, October 2004.

TA Blaine, PD Kim, OFC Ugwonali, WN Levine, LU Bigliani. Optimizing glenohumeral geometry in total shoulder arthroplasty. American Society for Shoulder and Elbow Surgery. Las Vegas, NV, November 2003.

Posters

PD Kim, R Raiszadeh. 12-month interim clinical outcomes following cervical and lumbar fusion. 2020. E poster. American association of neurological surgeons.

J Sclafani, K Raiszadeh, R Raiszadeh, PD Kim, K Liang, S. Gill, CW Kim. Initial Assessment of the Viability and Utility of an MIS Prospective Registry. International Society for the advancement of Spine Surgery (ISASS). Miami, FL, May 2, 2014.

E Swart, L Chen, PD Kim, CM Jobin, MP Rosenwasser. Botulinum toxin as a novel treatment for prevention of post-traumatic elbow stiffness. American Academy of Orthopedic Surgeons Annual Meeting. San Diego, CA, February 2011.

BW Su, PD Kim, T Cha, J Lee, E April, M Weidenbaum, A Vaccaro. An anatomical study of the mid-lateral pars relative to the pedicle footprint in the lower lumbar spine. North American Spine Society Annual Meeting. San Francisco, CA, November 2009.

BW Su, T Cha, PD Kim, J Lee, E April, M Weidenbaum, T Albert, A Vaccaro. An anatomic and radiographic study of lumbar facets relevant to percutaneous transfacet fixation. North American Spine Society Annual Meeting. San Francisco, CA, November 2009.

YJ Kim, K Bridwell, L Lenke, YB Kim, PD Kim. Comparative radiographic analysis of the sagittal spinopelvic alignment between 100 asymptomatic adults and 100 sagittally imbalanced patients: what are the critical radiographic parameters. The 44th Annual Scoliosis Research Society meeting, San Antonio, TX, September 2009.

PD Kim, AG Hayes, F Amin, M Codreanu, Y Akelina, AP Hays, MP Rosenwasser. Collagen nerve protectors in rat sciatic nerve repair: a morphometric and histologic analysis. Orthopedic Research and Education Foundation, New York Metropolitan Area Resident Research Competition. New York, NY, May 2008. 1st place poster presentation.

CM Jobin, E Rizzotto, L Chen, PD Kim, MP Rosenwasser. Botulinum toxin-A injections during contracture release for post-traumatic elbow stiffness. American Shoulder and Elbow Surgeons Open Annual Meeting. San Diego, CA, February 2007.

NM Raizman, M Putnam, MP Rosenwasser, RJ Strauch, N Meyer, C Bottino, C Jobin, PD Kim, A Mantica, F Amin, D Hanel. Early functional outcome of unstable distal radius fractures treated with external fixation versus locked volar plating: a prospective study. Orthopaedic Trauma Association Annual Meeting. Ottawa, Ontario, Canada, October 2005.

L Chen, TS Protopsaltis, J Lee, PD Kim, CM Jobin, MP Rosenwasser. Intraoperative injection of botulinum toxin-A for prevention of post-traumatic elbow stiffness. American Society for Surgery of the Hand Annual Meeting. San Antonio, TX, September 2005.

L Chen, CM Jobin, E Rizzotto, PD Kim, MP Rosenwasser. Intraoperative injection of botulinum toxin-A during capsular release for post-traumatic elbow stiffness. American Society for Surgery of the Hand Annual Meeting. San Antonio, TX, September 2005.

JT Monica, B Heyworth, JH Lee, CB Lipton, PD Kim, MP Rosenwasser. Long term follow-up of tendon interposition arthroplasty with dynamic tendon transfer for treatment of basal joint arthritis of the thumb.

American Orthopedic Association, Boston, MA, June 2004.

OFC Ugwonali, PD Kim, B Heyworth, WN Levine, LU Bigliani, TA Blaine. Radiographic assessment of glenohumeral relationships in total shoulder arthroplasty. Orthopaedic Research and Education Foundation, New York Metropolitan Area Resident Research Competition. New York, NY, 2003.

JP Cui, PD Kim, F Ausubel, NE Pierce. Pathogen-facilitated insect feeding. Penn State Plant Physiology Signaling Conference, University Park, PA, 2000.

SM Merkel, K Kim, PD Kim, GW Smith, CD Harvell. Antifungal and antibacterial activity in healthy and fungal-diseased sea fans (*Gorgonia ventalina*). 97th General Meeting of the American Society for Microbiology. Miami Beach, FL, 1997.

Relevant Experience

Research

- 2020 – Site Principal Investigator
 - A prospective randomized trial evaluating anterior cervical swelling after surgery with amniotic patch
- 2018- Site Principal Investigator
 - A prospective, post-market, multi-center study evaluating Vibone in cervical and lumbar spine fusion
- 2017 Site Principal Investigator
 - A FDA Phase 1b, Multicenter, Double-blind, Randomized, Placebo-controlled, Single Ascending-Dose, Clinical Study Evaluating the Safety, Tolerability and Exploratory Efficacy of a Targeted Single Injection of an Intradiscal Nuclear Factor- κ B Decoy Oligodeoxynucleotide (AMG0103) in Subjects with Chronic Discogenic Lumbar Back Pain
- 2012 Society for Minimally Invasive Spine Society (SMISS) Prospective Registry (MIS TLIF), Sub-Investigator
- 2009 Orthopedic Scientific Research Foundation Grant
 - Percutaneous transfacet fixation of the lumbar spine. Advisor: M Weidenbaum, M.D.
- 2008 Bioabsorbable implants to improve outcomes in peripheral nerve surgery. Advisor: M Rosenwasser, M.D.
 - Collagen nerve protectors in rat sciatic nerve repair: a morphometric and histological analysis
 - Cyanoacrylate, fibrin glue capping and diathermy in neuroma prevention
- 2004 Harrison L. Mclaughlin Research Fellow in the Trauma Training Center. Advisor: M Rosenwasser, M.D.
 - Prospective, randomized controlled trial for the use of intraoperative botulinum toxin-A for prevention of post-traumatic elbow stiffness
 - Clinical follow up of intraoperative botulinum toxin-A in elbow capsular releases
 - Prospective, randomized, double-blinded clinical trial hylan versus corticosteroid versus placebo for treatment of basal joint arthritis
 - Anatomic study of the anterior interosseous nerve
- 2001 National Institutes of Health (N.I.H.) Summer Research Grant
 - Immunologic Phenotype and Gene Therapy of Human Malignant Gliomas, Advisor: J Bruce, M.D.
- 1998-00 Genetic Mechanisms of *Arabidopsis*-Insect Interactions (Ph.D. Program), Advisor: N Pierce, Ph.D.
- 1996-98 Chemical Defenses of Gorgonian Corals (Undergraduate Honors Thesis), Advisor: D Harvell, Ph.D.

Teaching

- 1999-2000 Teaching Fellow for Introduction to Animal Behavior, Harvard University, Cambridge, MA
- 1998-2000 Teaching Fellow for Introductory Biology, Harvard University, Cambridge, MA
- 1998 English Conversation & Grammar Instructor, Yanbian University of Science & Tech., Yanji, P.R. China

Other Certifications

- 2008 Advanced Microsurgery Course, Columbia University, New York, NY
- 2005 Basic Microsurgery Course, Columbia University, New York, NY

Volunteer

- 2017 Health Volunteers Overseas. Spine Surgery, Tashkent, Samarkand, Bukhara, Uzbekistan. Host: Ministry of Health, Republic of Uzbekistan.
- 2011-17 San Diego County Medical Society Project Access
- 2009 Butterfly Foundation. Spine Surgery, Hospital for Traumatology and Orthopaedics, Ho Chi Minh City, Vietnam. Hosts: Drs. Andrew Moulton & Dr. Vo Van Thanh

- 1998 English Instructor, Yanbian Institute for Science and Technology, Yanbian, P.R. China

Interests/Hobbies

- golf•traveling•reading