



Advanced Orthopedic
& Sports Medicine Specialists

Michael S. Shen, MD

Work Experience

2/2010 - Present Advanced Orthopedic and Sports Medicine Specialists
Orthopedic Spine Surgeon

8/2006 – 1/2010 Cornerstone Orthopedics and Sports Medicine – Louisville, CO
Orthopedic Spine Surgeon

Boards

2005, 2008 American Board of Orthopedic Surgery

1998, 2000, 2001 USMLE

Education

8/2005 – 7/2006

Fellowship

The Spine Institute at Saint John's Health Center – Santa Monica, CA
Spine Surgery Fellow

6/2000 – 6/2005

Residency

NYU/Hospital for Joint Diseases – New York, NY
Department of Orthopedic Surgery
Orthopedic Surgery Resident

8/1996 – 5/2000

Medical School

Tufts University School of Medicine – Boston, MA
Doctor of Medicine
Alpha Omega Alpha Medical Honor Society

9/1991 – 6/1995

Under Graduate

University of California San Diego – La Jolla, CA
Bachelor of Science in Molecular Biology
Provost Honors

Memberships

North American Spine Society
American Academy of Orthopedic Surgeons
Alpha Omega Alpha Medical Honor Society
Colorado Medical Society

Research

- 2/2006 – 3/2006 Veteran's Administration Hospital, Minneapolis, Minnesota
Performed animal surgery and analysis investigating the effect of hydroxyapatite (HA) coating on the screw-bone interface in the Dynesys spine stabilization system in a sheep model.
- 11/1998 – 12/1998 Children's Hospital of Los Angeles, Los Angeles, California
Researcher, Department of Pediatric Neurosurgery
Completed an analytical review of prognostic factors in Craniopharyngiomas, which is being used in joint investigations performed by the Departments of Pediatric Neurosurgery and Pathology at the Children's Hospital of Los Angeles.
- 6/1997 – 8/1997 Children's Hospital of Los Angeles Dept. of Hematology/Oncology
Summer Research Fellowship Program, Los Angeles, California
Researcher, Department of Pediatric Neurosurgery
Performed clinical research, pathological analysis, and literature review of pediatric tumors in and around the third ventricle with application for determining the best surgical approaches for resection.
- 7/1995 – 8/1996 Scripps Research Institute, La Jolla, California
Research Assistant, Department of Vascular Biology
Designed and performed experimental studies to analyze platelet Integrin protein function, activation, and adhesion.
- 6/1994 – 8/1994 New York University Medical Center Summer Research Fellowship,
New York, New York – Research Assistant, Department of Dermatology/Pharmacology
Research and development of an inducible gene expression system to study Trichohyalin gene expression in normal epithelial and squamous cell carcinoma cell lines.
- 2/1992 – 3/1993 Salk Institute for Cancer Research, La Jolla, California
Research Assistant, Gene Expression Lab
Identified and analyzed cellular clones with multiple genetic sequence repeats and studied the role their gene amplification played in oncogenesis.
- 6/1990 – 5/1991 Eleanor Roosevelt Institute for Cancer Research, Denver, Colorado
Research Assistant, Department of Molecular Biology
Aided in genetically mapping the location of an unknown human gene found to be required for elevated HIV expression.
- 9/1989 – 5/1990 University of Denver, Denver, Colorado
Research Assistant, Department of Biology
Designed and performed experiments to elucidate the role of calcium, and other agents that might effect calcium levels, on the dispersal of pigment in melanophore cells.

Teaching Experience

- 11/2009 Stryker Young Lions Course, Fort Lauderdale, Florida
Course Chairman

- 6/2009 Stryker X-ray and Boards Review Course, Las Vegas, Nevada
Course Instructor
- 9/1997 – 5/2000 Tufts University School of Medicine, Boston, Massachusetts
Tutor
Aided students in studying and preparing for both medical school courses and USMLE Step 1 & 2 exams.
- 3/1994 – 6/1995 University of California, San Diego, La Jolla, California
Teaching Assistant, Department of Biochemistry and Genetics
Organized formal weekly discussion sessions, tutored, and held office hours to review course material as well as sided in exam write-up and preparation.

Posters

- 2007 Pradhan B, Shen M, Kropf M, Bae H, Delamarter R. 3 and 4-Level Anterior Cervical Fusion with rhBMP-2, Allograft, and Dynamic Plate: Fusion Rates, Subsidence, Radiographic Incorporation and Complications. 2007 North American Spine Society Annual Meeting, Austin, TX, Oct 23-27, 2007.
- 2006 Shen M, Pradhan B, Bae H, Kropf M, Delamarter R. Single level artificial disc replacement at L4-5 versus L5-S1 - is there any difference in technique, morbidity, or result? 2006 North American Spine Society Annual Meeting, Seattle, WA, Sept 26 –30, 2006.
- 2006 Delamarter R, Bae H, Kropf M, Kanim L, Shen M, Pradhan B. 1 versus 2 versus 3-level lumbar artificial disc replacement – a prospective report of clinical outcomes with the ProDisc-L device. 2006 North American Spine Society Annual Meeting, Seattle, WA, Sept 26 – 30, 2006.
- 2006 Shen M, Pradhan B, Bae H, Kropf M, Delamarter R. Single level artificial disc replacement at L4-5 versus L5-S1 - is there any difference in technique, morbidity, or result? 2006 Scoliosis Research Society Meeting, Monterey, CA, Sept 13 – 16, 2006.
- 2006 Spayde E, Pradhan B, Bae H, Kropf M, Shen M, Delamarter R. Return to work outcomes after lumbar artificial disc replacement. 2006 Spine Arthroplasty Society Annual Meeting, Montreal, Quebec, Canada, May 10-13, 2006.

Publications

- 2007 Shen M, Razi A, Lurie J, Weinstein J. Retrolisthesis and lumbar disc herniation, A pre-operative assessment of patient function. The Spine Journal. July/August 2007; 7(4): 406-13.

- 2007 Shen M, Kim Y. Osteoporotic vertebral compression fractures: a review of current surgical management techniques. *American Journal of Orthopaedic Surgery*. May 2007; 36(5): 241-48.
- 2006 Shen M, Kim Y. Vertebroplasty and kyphoplasty, treatment techniques for managing osteoporotic vertebral compression fractures. *Bull Hosp Jt Dis*. 2006: 64(3-4); 106-13.
- 2005 Shen M, Meislin R. A new method to utilize a motorized shaver in hip arthroscopy without the use of a cannula. *Arthroscopy: The Journal of Arthroscopy and Related Research*. July 2005: 21 (7); 895.
- 1994 Shen, M. The role of calcium and other agents in melanophore cells. AAAS Annual Meeting, Abstracts of Papers. 157th National Meeting, February 14-19, 1991, 141.
- Shen M, Bae H, Maurer P, Peppelman W, Beutler W, Linovitz R, Westerlund E, Peppers T, Lieberman I, Kim C, Girardi F, Pradhan B. Clinical experience using a novel bio-ceramic for treating vertebral compression fractures with two year follow-up.
Accepted for publication
- Shen M, Kropf M, Bae H, Pradhan B, Spayde E, Delamarter R. Early analysis of multi-level lumbar artificial disc replacement.
Submitted for publication
- Shen M, Kropf M, Bae H, Pradhan B, Delamarter R. Single level artificial disc replacement at L4-5 versus L5-S1. Is there any difference in technique, morbidity, or result?
Submitted for publication
- Shen M, Kropf M, Bae H, Pradhan B, Delamarter R. ProDisc artificial lumbar disc replacement: 2 – 4 year results from the twolevel randomized study. *Submitted for publication*
- Shen M, Pradhan B, Delamarter R. Fusion rate following multilevel anterior cervical discectomy and fusion using cervical plating and bone morphogenetic protein-2. *Submitted for publication*

Presentation

- 2010 Shen M. Cervical Spine Injuries in Rugby. USA Rugby Medical Symposium, Las Vegas, NV, February 12, 2010.
- 2007 Pradhan B, Bae H, Shen M, Kropf M, Delamarter R. Three and four-level cervical fusion with rhBMP-2, allograft, and dynamic plate: fusion rates, subsidence, radiographic incorporation and complications. Special interest poster presentation 2007 International Meeting of Advanced Spine Techniques, Paradise Island, Bahamas, July 11-14, 2007.

- 2007 Pradhan B, Bae H, Shen M, Kropf M, Delamarter R. L4-5 vs. L5-S1: Is 1 level more suited than the other for lumbar disc arthroplasty of fusion? A multi-center, prospective, randomized, and controlled comparison. Special Interest poster presentation 2007 International Meeting on Advanced Spine Techniques, Paradise Island, Bahamas, July 11-14, 2007.
- 2006 Shen M, Pradhan B, Bae H, Kropf M, Delamarter R. Single level artificial disc replacement at L4-5 versus L5-S1 - is there any difference in technique, morbidity, or result? Poster presentation for 2006 Western Orthopaedic Association Annual Meeting, Santa Fe, NM, Oct 11-15, 2006.
- 2006 Bae H, Shen M, Maurer P, Poppelman W, Beutler W, Linovitz R, Westerlund E, Peppers T, Lieberman I, Kim C, Girardi F, Pradhan B. Clinical experience using a novel bio-ceramic for treating vertebral compression fractures with one to two year follow-up. Special interest poster presentation 2006 North American Spine Society Annual Meeting, Seattle, WA, Sept 26 – 30, 2006.
- 2006 Shen M, Pradhan B, Bae H, Kropf M, Delamarter R. Single level artificial disc replacement at L4-5 versus L5-S1 - is there any difference in technique, morbidity, or result? Special interest poster presentation 2006 International Meeting on Advanced Spine Techniques, Athens, Greece, July 12 – 15, 2006.
- 2004 Shen, M. Surgical Options in Treatment of Calcaneal Fracture Malunions. Annual Melvin Jahss Lecture Symposium, Hospital for Joint Diseases, New York, NY, April 15, 2004.
- 2002 Shen, M. Osteotome Positioning on C-Arm Intensification for the Berneese Periacetabular Osteotomy: Minimizing Osteotomy Related Complications. The Pediatric Orthopaedic Society of New York Annual Meeting, Mt. Sinai Hospital, New York, NY, April 2002.

Languages Fluent in Mandarin Chinese