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## 10 Surgeons Performing Robotic- and Computer-Assisted Spine Surgery

Written by [Laura Miller](#) | August 10, 2011

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Here are 10 surgeons who are performing robotic- and computer-assisted spine surgery. This list is meant as general information and is not a "top surgeons" list. This list is not an endorsement of any surgeon's or provider's clinical abilities.

**Samuel Bederman, MD (UC Irvine Medical Center, Orange, Calif.).** Dr. Bederman is the director of orthopedic inpatient care at UC Irvine Medical Center. Dr. Bederman was among the first surgeons in Orange County, Calif., to perform robotic-assisted spine surgery at UC Irvine. He has a professional interest in deformity reconstruction, complex cervical surgery and minimally invasive spine procedures. During his career, Dr. Bederman has been recognized by the Canadian Spine Society for his research and identified as an emerging leader by the American Orthopaedic Association. Dr. Bederman earned his medical degree and completed his residency at the University of Toronto. His additional training includes a fellowship in spinal deformity at the University of California in San Francisco and the AO Spine Fellowship at Royal Adelaide Hospital in Australia.

**Nitin N. Bhatia, MD (UC Irvine Medical Center, Orange, Calif.).** Dr. Bhatia is the chief of adult and pediatric spinal surgery at UC Irvine and was one of the first spine surgeons to perform robot-assisted spine surgeries in Orange County. He has a professional interest in all areas of spine pathology, such as spine trauma, scoliosis and reconstruction. He is a member of the Cervical Spine Research Society, Scoliosis Research Society and North American Spine Society. In addition to his clinical work, Dr. Bhatia frequently gives lectures and conducts meetings to teach advanced spine surgery techniques. Throughout his career, he has published several professional articles in journals such as the *Journal of Bone and Joint Surgery*. Dr. Bhatia earned his medical degree at Baylor College of Medicine in Houston and completed his residency in orthopedic surgery at the University of California in Los Angeles. His additional training includes fellowships in spinal deformity at Miami Children's Hospital and in spine surgery at the University of Miami, Jackson Memorial Medical Center.

**Frank Cammisia, Jr., MD (Hospital for Special Surgery, New York City).** Dr. Cammisia is the chief of the spine service at Hospital for Special Surgery. He has a professional interest in minimally invasive spine surgery, computer-assisted spine surgery, athletic spinal injuries and artificial disc replacement. He is a spine consultant for the National Hockey League Players Association and regularly works with professional athletes from teams such as the New York Knicks. During his career, he participated in studies of computer-assisted image guidance and demineralized bone matrix. He is a member of the North American Spine Society, Cervical Research Society and American Spinal Injury Association. Dr. Cammisia earned his medical degree at College of Physicians and Surgeons in New York City and completed his residency in orthopedic surgery at HSS. His additional training includes a fellowship in spine surgery at University of Miami, Jackson-Memorial Medical Center.

**Dennis P. Devito, MD (Children's Healthcare of Atlanta).** Dr. Devito is on the medical advisory board for Mazor Robotics, maker of the SpineAssist robotic system, and director of multi-specialty clinics at Children's Healthcare of Atlanta and Scottish Rite. He is a fellow of the American Academy of Pediatrics and a member with American Academy of Orthopaedic Surgeons. He has a professional interest in spinal deformities, neonatal pediatrics and reconstructive orthopedics. Dr. Devito earned his medical degree at Washington University School of Medicine in St. Louis and completed his residency in orthopedic surgery at Duke University Medical Center in Durham, N.C. His additional training includes a fellowship in pediatric orthopedic surgery at Children's Hospital of Boston.

**J. Patrick Johnson, MD (Cedars-Sinai Spine Center, Los Angeles).** Dr. Johnson is a neurosurgeon at Cedars-Sinai Medical Center, where he previously served as director of the Cedars-Sinai Institute for Spinal Disorders and established a combined neurosurgery and orthopedic fellowship program. He has a professional interest in computer-guided surgical applications and procedures, endoscopic and minimally invasive spine surgery and artificial disc replacement. During his career, he has held a particular interest in biologic stem cell repair of spinal cord injuries. In addition to his practice, Dr. Johnson has served as the director of the California Association of Neurosurgeons. He earned his medical degree at Oregon Health Sciences University in Portland, Ore., and completed his neurosurgical residency at the University of California in Los Angeles. His additional training includes fellowships in spine surgery at the University of Tennessee and the National Hospital for Neurology and Neurosurgery in London, England.

**John Keller, MD (Great Lakes Neurosurgical Associates, Grand Rapids, Mich.).** Dr. Keller uses the Renaissance system from Mazor Robotics during appropriate spine surgeries to guide implant placement. He has a professional interest in treating patients with complex disorders and performing minimally invasive interventions. In addition to his clinical practice, Dr. Keller is a member of the Congress of Neurological Surgeons and American Association of Neurological Surgeons. He earned his medical degree at Michigan State University and completed his residency at the University of Miami at Jackson Memorial Hospital.

**Isador Lieberman (Texas Back Institute, Plano).** Dr. Lieberman is on the medical advisory board for Mazor Robotics and has been involved in the research and development of SpineAssist. Throughout his career, Dr. Lieberman has received several awards for his research, including the Cleveland Clinic Foundation Innovations Award. He has a professional interest in scoliosis and spinal tumors. He is a member of several professional societies, including North American Spine Society, American Academy of Orthopaedic Surgeons and Scoliosis Research Society. Throughout his career, he has been committed to providing charitable spine care in Uganda. Dr. Lieberman earned his medical degree at the University of Toronto in Canada and completed his residency at several hospitals in Toronto. His additional training includes a spine and trauma fellowship at Toronto Hospital and spine surgery at The Queen's Medical Center in England.

**Harvinder S. Sandhu, MD (Hospital for Special Surgery, New York City).** Dr. Sandhu is an associate attending orthopedic surgeon at Hospital for Special Surgery and an associate professor of orthopedic surgery at Weill Cornell Medical College, both in New York City. He has a professional interest in minimally invasive spine surgery, computer-assisted surgery and microsurgery. In addition to his clinical practice, Dr. Sandhu has published several peer-reviewed journals on topics such as biologic enhancement of spine surgery and minimally invasive management of spinal disorders. He has earned research awards from North American Spine Society, Orthopaedic Research Society and International Society of the Study of the Lumbar Spine. He earned his medical degree at Northwestern University in Illinois and completed his residency at State University of New York in New York City. His additional training includes a fellowship at the University of California in Los Angeles.

**Robert Watkins, Jr., MD (Marina Del Rey Hospital, Marina Del Rey, Calif.).** Dr. Watkins is co-director of the Marina Spine Center at Marina Del Rey Hospital and has a professional interest in minimally invasive spine surgery, computer-assisted spine surgery and artificial disc replacement. He is a spinal consultant for the University of Southern California, Los Angeles Dodgers and other local sports teams. In addition to his clinical practice, Dr. Watkins has authored several chapters on spinal biomechanics, deformity and computer guidance in spine surgery. He also teaches advanced surgical techniques in minimally invasive surgery and lateral lumbar interbody fusion. Dr. Watkins earned his medical degree at the University of Southern California Keck School of Medicine and completed his residency in orthopedic surgery at the Los Angeles County/University of Southern California General Hospital. His additional training includes a fellowship in spine surgery at The Queen's Medical Centre in England.

**William C. Welch, MD (Penn Medicine, Philadelphia).** Dr. Welch is the chief of neurosurgery at Pennsylvania Hospital and uses robotic-assisted technology when performing spinal fusions and disc repair. He is a member of the American Association of Neurological Surgeons, Cervical Spine Research Society and Congress of Neurological Surgeons. In addition to his clinical practice, Dr. Welch has published his research in professional journals such as *The Spine Journal* and the *Journal of Neurosurgery: Spine*. Dr. Welch earned his medical degree at State University of New York, Downstate Medical Center and completed his residency in neurological surgery at the University of Rochester (N.Y.)-Strong Memorial Hospital. His additional training includes fellowships in neuro-oncology and spine surgery at Albert Einstein College of Medicine in Bronx, N.Y.

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