

# Orthopedics

## This Week

## Best New Spine Technologies: Silver Medal Winners

BY ROBIN YOUNG



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**H**ere are the best new spine surgery technologies for 2024, Silver Medal Winners.

Every year *Orthopedics This Week* convenes a panel of top surgeons to review dozens of new technology submissions from around the world.

This award was inaugurated more than a decade ago to recognize the inventors, engineering teams, surgeons and their companies who have created the most innovative, enduring, and practical products to treat back care.

To win the *Orthopedics This Week* Best New Technology Award for spine care, a new technology must score highly for each of

the following criteria:

1. Be creative and innovative.
2. Bring long term significance to treating spine pathologies. Does this technology have staying power?
3. Solve a current clinical problem.
4. Improve standard of care
5. Be cost effective?
6. Members of the judges panel would consider personally using it.

We received a record number of submissions for 2024.

### The Judges

**Peter Derman, M.D.:** A minimally invasive and endoscopic spine surgeon at Texas Back Institute, an honors graduate from Stanford University, a graduate of the Perelman School of Medicine at the University of Pennsylvania and concurrently an MBA grad from the Wharton School of Business, Dr. Derman is a key surgeon opinion leader and dedicated physician-researcher, exploring ways to better medicine for future generations.

**Stephen Hochschuler, M.D.:** Co-founder and chairman of the board of the Texas Back Institute, Stephen Hochschuler, M.D., is a graduate of Columbia College in New York, a Harvard Medical School graduate and pioneer in modern spine surgery. He



(L to R): Peter Derman, M.D., Stephen Hochschuler, M.D., Isaac Moss, M.D., Kris Radcliff, M.D., Juan Uribe, M.D., and Michael Wang, M.D., M.B.A.

began his private practice since 1977 and taught at the University of Texas Health and Science Center Southwestern Medical School. He founded and mentored dozens of medical companies.

**Isaac Moss, M.D.:** Dr. Moss is Chair, Department of Orthopaedic Surgery, Professor of Orthopaedic Surgery, Co-Director of University of Connecticut's Comprehensive Spine Center. Dr. Moss is a fellowship trained spine surgeon at the UConn Musculoskeletal Institute. Dr. Moss graduated from University of Toronto, was the department's top graduate, then trained at Rush University Medical Center in Chicago. Dr. Moss's master's degree is in biomedical engineering. He has received many awards and scholarships for his contributions to cutting edge research for novel biologic therapies for intervertebral disc degeneration.

**Kris Radcliff, M.D.:** Dr. Kris Radcliff is an internationally recognized spine surgery thought leader, full professor in the Department of Neurological Surgery at Thomas Jefferson University, an honors graduate from Harvard College, a graduate of Duke University's School of Medicine on a prestigious Dean's Tuition Scholarship, a Baylor College of Medicine resident and, before founding the Spinal DISC center, Dr. Radcliff was a spine surgery fellow at the Rothman Orthopaedic Institute.

**Juan Uribe, M.D.:** Juan Uribe, M.D., is Chief of the Division of Spinal Disorders, Volker K. H. Sonntag Chair for Spine Research, and Vice Chairman of Neurosurgery at Barrow Neurological Institute. He was named President and Chair of the AANS/CNS Section on Disorders of Spine and the Peripheral Nerves in 2024. Dr. Uribe earned his medical degree from Kris Ra in Colombia, completed residency at Hospital San Vicente de Paul and, later, at the University of South Florida and a fellowship at the University of Miami.

**Michael Wang, M.D., M.B.A.:** Michael Y. Wang, M.D., FACS is Chief of Neurosurgery, University of Miami Hospital Spine Neurosurgery Fellowship Director and Professor with Tenure, Departments of Neurosurgery and Rehab Medicine. Dr. Wang earned both his BS and MD degrees from Stanford University, residency at the University of Southern California, fellowship at the University of Miami. He has held many leadership roles at multiple surgeon societies and has edited 12 medical textbooks, authored over 600 publications in the medical literature.

## NuvoDisc Microgel

**Inventors:** Wesley Sierk, Eric Olson, Jeff Zisselman, and Nick Manesis / **Engineers:** Nick Manesis / **Clinician Developers:** John Edwards, M.D. Mark Stouffer, M.D. Jon O Bray, M.D., Rick O Bray, M.D. Derek Freiden, M.D.

**How it Improves Spine Surgery:** NuvoDisc is an entirely novel outpatient approach to creating and maintaining disc height thereby providing stability and support for patients with degenerative disc disease.

The NuvoDisc Microgel is comprised of microspheres of polymethylmethacrylate (PMMA) with Pluronic F127 hydrogel. The refrigerated compound flows into the disc space through a 7" spinal needle and then cures to a flexible semi-solid at body temperature.

Using NuvoDisc, DDD patients can be treated in an ambulatory surgical center or pain clinic. No large incisions, painful surgical recovery or physical therapy which are often required for more traditional spine surgery treatments for lower back pain.

**Company:** 33 Medical Inc.

**Website:** [www.33medicalinc.com](http://www.33medicalinc.com)



NuvoDisc Micro

