

DIVISION OF PEDIATRIC ORTHOPAEDIC SURGERY OUR TEAM

DAVID P. ROYE, JR., MD



Dr. Roye is the Chief of the Pediatric Orthopedic service at Morgan Stanley Children's Hospital of NewYork-Presbyterian and the St. Giles Professor of Pediatric Orthopedic Surgery at Columbia University. He has been a member of the faculty at Columbia since 1980 when he finished his fellowship at the Hospital for Sick Children in Toronto. He has committed himself to caring for children with orthopedic problems, teaching future orthopedic surgeons and conducting research on children's musculoskeletal problems.

He has gained the respect and admiration of his patients (their parents) and students with quiet competence, commitment and caring. Dr. Roye has special interests in treating scoliosis, other spinal deformities and hip surgery in adolescents. He has a special interest in international health and travels annually to teach and to treat in Africa, Eastern Europe and China.

Dr. Carol Roye, his wife, is a successful researcher in adolescent women's health. They have six children including four physicians all aimed at pediatric specialties. Dr. Roye is an avid cyclist and loves to compete in triathlons.

CLINICAL INTERESTS

- Pediatric Spinal Disorders (Scoliosis)
- Pediatric Orthopaedic Surgery
- Limb Lengthening
- Club Foot and Other Foot Deformities
- Cerebral Palsy and other Neuromuscular Disease
- Hip Disease and Dysplasia
- Pediatric Trauma
- Sports Injuries

BOARD CERTIFICATIONS

American Board of Orthopaedic Surgery

LICENSURE

New York
Connecticut
New Jersey
Ontario, Canada

EDUCATION

Fellowship

1979-1980

The Hospital for Sick Children, University of Toronto
Pediatric Orthopaedic Surgery
Clinical Fellow

Residency

1978-1979

Columbia-Presbyterian Medical Center
The New York Orthopaedic Hospital
Orthopaedic Surgery
Resident and Junior Annie C. Kane Fellow

1976-1978

Columbia-Presbyterian Medical Center
The New York Orthopaedic Hospital
Orthopaedic Surgery

Internship

1975-1976

Roosevelt Hospital
New York, NY
General Surgery

Medical School

1975

Columbia University College of Physicians & Surgeons
M.D.

Undergraduate

1971

University of Oklahoma - Norman, Oklahoma
B.A.

CURRENT HOSPITAL AND ACADEMIC APPOINTMENTS

- The Livingston Professor of Pediatric Orthopaedic Surgery
Columbia University College of Physicians and Surgeons
- Attending Orthopaedic Surgeon and Director of Pediatric Orthopaedics
Morgan Stanley Children's Hospital of New York-Presbyterian
- Professor of Clinical Orthopaedic Surgery
Columbia University College of Physicians and Surgeons
- Consulting Medical Staff
Department of Orthopaedic Surgery
Helen Hayes Hospital

- Consulting Medical Staff
Department of Orthopaedic Surgery
Greenwich Hospital
- Consulting Medical Staff
Department of Orthopaedic Surgery
White Plains Hospital

PROFESSIONAL ORGANIZATIONS AND SOCIETIES

American Medical Association Diplomate, National Board of Medicine
 Alumni Association, College of Physicians and Surgeons
 Alumni Council
 Awards Committee
 Development Committee
 Diplomate, American Board of Orthopaedic Surgery
 Fellow, New York Academy of Medicine
 Pediatric Orthopaedic Club of New York
 North American Spine Society
 Fellow, American Academy of Orthopaedic Surgeons Secretary
 Fellow, American Academy for Cerebral Palsy and Developmental Medicine
 Fellow, American Academy of Pediatrics
 Spine Club of New York City
 Board of Examiners, American Board of Orthopaedic Surgery
 Fellow, Scoliosis Research Society
 Fellow, Orthopaedic Research Society
 Academic Orthopaedic Association
 SICOT, Societe Internationale de Chirurgie Orthopedique et de Traumatologie
 European Pediatric Orthopaedic Society
 American Orthopaedic Association
 American Orthopaedic Society
 Pediatric Orthopaedic Society of North America Pediatric Orthopaedic Outcome
 Instrumentation Task Force Finance Committee
 Pediatrics in Review: Update for the New Millennium Otolaryngology/Head and Neck
 Surgery Review Committee

VOLUNTEER ACTIVITIES

Operation Smile. Norfolk, VA
 Reconstructive Surgery for Children World Wide
 Surgical Missions: Kenya. Rumania.
 Operations Committee

Healing the Children. Butler, New Jersey.
 Consultant

Eastern Christian Children's Retreat. Wyckoff, NJ
 Consultant

Children of China Pediatric Foundation, NY
Surgical Missions: Harrin, China

RECENT HONORS

Best Doctors In New York: New York Magazine
America's Top Doctors: Castle Connolly Medical Ltd.

SELECTED PUBLICATIONS

Vitale MG, Matsumoto H, Kessler MW, Hoffmann W, Roye DP Jr. Osteogenesis Imperfecta: Determining Demographics and the Predictors of Death from an Inpatient Population. *J Pediatr Orthop*. 2007 Mar;27(2):228-232.

Lowenstein JE, Matsumoto H, Vitale MG, Weidenbaum M, Gomez JA, Lee FY, Hyman JE, Roye DP Jr. Coronal and Sagittal Plane Correction in Adolescent Idiopathic Scoliosis: A Comparison between All Pedicle Screw versus Hybrid Thoracic Hook Lumbar Screw Constructs. *Spine*. 2007 Feb 15;32(4):448-452.

Vitale MG, Goss JM, Matsumoto H, Roye DP Jr. Epidemiology of pediatric spinal cord injury in the United States: years 1997 and 2000. *J Pediatr Orthop*. 2006 Nov-Dec;26(6):745-9.

Vitale MG, Vitale MA, Lehmann CL, Hyman JE, Roye DP Jr, Skaggs DL, Schmitz ML, Sponseller PD, Flynn JM. Towards a National Pediatric Musculoskeletal Trauma Outcomes Registry: the Pediatric Orthopaedic Trauma Outcomes Research Group (POTORG) experience. *J Pediatr Orthop*. 2006 Mar-Apr;26(2):151-6.

Lee FY, Sinicropi SM, Lee FS, Vitale MG, Roye DP Jr, Choi IH. Treatment of congenital pseudarthrosis of the tibia with recombinant human bone morphogenetic protein-7 (rhBMP-7). A report of five cases. *J Bone Joint Surg Am*. 2006 Mar;88(3):627-33.

Vitale MA, Choe JC, Seski AM, Hyman JE, Lee FY, Roye DP, Vitale MG. The Effect of Limb Length Discrepancy on Health-related Quality of Life: is the '2 cm rule' Appropriate? *Journal of Pediatric Orthopaedics B*. 2006;15:1-5.

Vitale MG, Roye EA, Choe JC, Hyman JE, Lee FY, Roye DP. Assessment of Health Status in Patients With Cerebral Palsy: What is the Role of Quality-of-Life Measures? *Journal of Pediatric Orthopaedics*. 2005; 25: 792-797.

Vitale MG, Choe JC, Vitale MA, Lee FY, Hyman JE, Roye DP Jr. Patient-based outcomes following clubfoot surgery: A sixteen year follow-up study. *Journal of Pediatric Orthopaedics*. 2005;25.

Clapcich AJ, Emerson RG, Roye DP Jr, Xie H, Gallo EJ, Dowling KC, Ramnath B, Heyer EJ. The effects of propofol, small-dose isoflurane, and nitrous oxide on cortical somatosensory evoked potential and bispectral index monitoring in adolescents undergoing spinal fusion. *Anesthesia & Analgesia*. 2004;99:1334-40.

Ugwonali OF, Lomas G, Choe JC, Hyman JE, Lee FY, Vitale MG, Roye DP Jr. Effect of bracing on the quality of life of adolescents with idiopathic scoliosis. *Spine Journal: Official Journal of the North American Spine Society*. 2004;4:254-60.

Roye BD, Hyman J, Roye DP Jr. Congenital idiopathic talipes equinovarus. *Pediatrics in Review*. 2004;25:124-30.

Alexianu D, Skolnick ET, Pinto AC, Ohkawa S, Roye DP Jr, Solowiejczyk DE, Hyman JE, Sun LS. Severe hypotension in the prone position in a child with neurofibromatosis, scoliosis and pectus excavatum presenting for posterior spinal fusion. *Anesthesia & Analgesia*. 2004;98:334-5.

Vitale MG, Choe JC, Hwang MW, Bauer RM, Hyman JE, Lee FY, Roye DP Jr. Use of ketorolac tromethamine in children undergoing scoliosis surgery. An analysis of complications. *Spine Journal: Official Journal of the North American Spine Society*. 2003;3 : 55-62.

Roye DP Jr., Roye BD. Idiopathic congenital talipes equinovarus. *Journal of the American Academy of Orthopaedic Surgeons*. 2002;10:239-48.

Vitale MG, Levy DE, Park MC, Choi H, Choe JC, Roye DP Jr. Quantifying risk of transfusion in children undergoing spine surgery. *Spine Journal: Official Journal of the North American Spine Society*. 2002;2:166-72.

Vitale MG, Levy DE, Johnson MG, Gelijns AC, Moskowitz AJ, Roye BP, Verdisco L, Roye DP Jr. Assessment of quality of life in adolescent patients with orthopaedic problems: are adult measures appropriate? *Journal of Pediatric Orthopedics*. 2001;21:622-8.

Vitale MG, Levy DE, Moskowitz AJ, Gelijns AC, Spellman M, Verdisco L, Roye DP Jr. Capturing quality of life in pediatric orthopaedics: Two recent measures compared. *Journal of Pediatric Orthopaedics*. 2001; 21:629-35.

Hyman JE, Lee FY, Dormans JP, Davidson RS, Magnusson M, Roye DP Jr. Orthopaedic Surgery, Chapter, In: *Pediatric Secrets*, Third Edition RA Olin and MF Ditmar (Eds). 2001.

Vitale M, Roye DP Jr. Short-term outcomes analysis in pediatric orthopaedics. *Journal of Bone & Joint Surgery - American Volume*. 2001;83:619-20.

Roye BD, Vitale MG, Gelijns AC, Roye DP Jr. Patient-based outcomes after clubfoot surgery. *Journal of Pediatric Orthopedics*. 2001;21:42-9.

Roye DP Jr., Raimondo RA. Surgical treatment of the child's and adolescent's flexible flatfoot. *Clinics in Podiatric Medicine & Surgery*. 2000;17:515-30.

Vitale MG, Higgs GB, Liebling MS, Roth N, Roye DP Jr.. Superior mesenteric artery syndrome after segmental instrumentation: a biomechanical analysis. *American Journal of Orthopedics (Chatham, Nj)*. 1999;28:461-7.

Roye DP Jr. Recombinant human erythropoietin and blood management in pediatric spine surgery. *Orthopedics*. 1999;22:158-60.

Vitale MG, Stazzone EJ, Gelijns AC, Moskowitz AJ, Roye DP Jr. The effectiveness of preoperative erythropoietin in averting allogenic blood transfusion among children undergoing scoliosis surgery. *Journal of Pediatric Orthopaedics, Part B*. 1998;7:203-9.

Paylakis SG, Chusid RL, Roye DP Jr., Nordli DR. Valproate therapy: Predisposition to bone fracture? *Pediatric Neurology* 1998;19:143-4.

Schwab FJ, Farcy JP, Roye DP Jr. The sagittal pelvic tilt index as a criterion in the evaluation of spondylolisthesis. Preliminary observations. *Spine*. 1997;22:1661-7.

Levin TL, Berdon WE, Lachman RS, Anyane-Yeboah K, Ruzal-Shapiro C, Roye DP Jr. Lumbar gibbus in storage diseases and bone dysplasias. *Pediatric Radiology*. 1997;27:289-94.

KJ Nagle, RG Emerson, DC Adams, EJ Heyer, DP Roye, Jr., F Schwab, M Weidenbaum, P McCormick, J Piel-Spellman, BM Stein, JP Farcy, EJ Gallo, KC Dowling, CA Turner. Intraoperative monitoring of motor evoked potentials: reviewed 116 cases. *Neurology* 1996;4:999-1004.

Nercessian OA, Roye DP Jr., Bini SA, Dick HM. Supracondylar femoral osteotomies for the correction of angular deformity about the knee in children. A follow-up study. *American Journal of Knee Surgery*. 1995;8:48-51.

Roye DP Jr., Farcy JP, Rickert JB, Godfried D. Results of spinal instrumentation of adolescent idiopathic scoliosis by King type. *Spine*. 1992;17:270-3.

Roye DP Jr., Rothstein P, Rickert JB, Verdisco L, Farcy JP. The use of preoperative erythropoietin in scoliosis surgery. *Spine*. 1992;17:204-205.

Roye DP Jr., Bini SA, Infosino A. Late surgical treatment of lateral condylar fractures in children. *Journal of Pediatric Orthopedics*. 1991;11:195-9.

Roye DP Jr., Chorney GS, Deutsch LE, Mahon JH. Femoral varus and acetabular osteotomies in cerebral palsy. *Orthopedics*. 1990;13:1239-43.

Phillips DP, Roye DP Jr., Farcy JP, Leet A, Shelton YA. Surgical treatment of scoliosis in a spinal muscular atrophy population. *Spine*. 1990;15:942-5.

SELECTED PRESENTATIONS AND POSTERS

The Epidemiology of Pediatric Spinal Cord Injury in the US. Columbia University; Children's Hospital of New York, Presented at AAOS 2006 Annual Meeting, Chicago, IL. March 2006.

Coronal and Sagittal Plane Correction in Adolescent Idiopathic Scoliosis: A Comparison Between Thoracic Pedicle Screw and Hook Constructs. Presented at AAOS 2006 Annual Meeting, Chicago, IL. March 2006.

Delaying the Treatment of Supracondylar Fractures: Has the Pendulum Swung too Far? Presented at the Annual meeting of the Pediatric Orthopaedic Society of North America, San Diego, CA. May 2006.

A Retrospective Cohort Study of Pulmonary Function, Radiographic Measures and Quality of Life in Children with Congenital Scoliosis: An Evaluation of Patient Outcomes after Traditional Spine Surgery. Presented at Scoliosis Research Society, Monterey, CA. September 2006.

The Efficacy of Preoperative Erythropoietin Administration in Pediatric Neurogenic Scoliosis Patients. Presented at Scoliosis Research Society, Monterey, CA. September 2006.

The Epidemiology of SCFE: An Update. Presented at the American Academy of Pediatrics, San Francisco, CA. Oct, 2004. Presented at the 72nd Annual Meeting AAOS, Washington, DC. March 2005.

Use of rhEPO in Patients With Neurogenic Scoliosis: A Randomized Controlled Trial. Presented at the American Academy of Pediatrics, San Francisco, CA. October 2004.

Treatment of Closed Femoral Shaft Fractures in Children, Ages 6-10: National Practice Patterns & Emerging Trends. Presented at the 71th Annual Meeting AAOS, San Francisco, CA. February 2004.

What is the Best Setting for Training for Scoliosis Surgery? A Comparison of Surgical Experience of Spine vs. Pediatric Fellows in California. Presented at the American Academy of Pediatrics, New Orleans, LA. November 2003. Presented at the 71th Annual Meeting AAOS, San Francisco, CA. February 2004.

In-Patient Pediatric Trauma: The Most Frequent Traumatic Orthopaedic Injuries from a National Pediatric Inpatient Population. Presented at the American Academy of Pediatrics, New Orleans, LA. November 2003. Presented at the 71th Annual Meeting AAOS, San Francisco, CA. February 2004.

Operative Treatment of Scoliosis in New York State by Surgeons with Pediatric vs. Spine Fellowship Training. Presented at the 71th Annual Meeting AAOS; San Francisco, CA. February 2004. Presented at the American Academy of Pediatrics, New Orleans, LA. November 2003. Presented at the 2005 Annual meeting of the Pediatric Orthopaedic Society of North America. Ottawa, CA - Winner of Best Clinical Scientific Paper.

LANGUAGES SPOKEN IN OFFICE OTHER THAN ENGLISH

Spanish