


Orthopedic Surgery

Nemours Children's Hospital, Delaware

 1600 Rockland Road
Wilmington, DE 19803

 302.651.5913

 [Nemours.org](https://www.Nemours.org)

We have provided regional, national and international leadership in pediatric orthopedics for more than 80 years and treat a broad range of conditions including:

- Arthrogyrosis
- Bone tumors
- Cerebral palsy
- Clubfoot
- Fractures/orthopedic trauma
- Gait and leg length discrepancies
- Hand and upper extremity disorders
- Hip disorders
- Osteogenesis imperfecta
- Scoliosis and spinal disorders
- Skeletal dysplasia
- Sports medicine and concussion

Inpatient and outpatient services that support the orthopedic program include:

- Gait and motion analysis lab
- Cast room
- Brace, orthotic and prosthetic services
- Medical imaging, including EOS
- Pharmacy
- Rehabilitation services
- Physical and occupational therapy



Suken A. Shah, MD, FAAOS, FAOA

Suken A. Shah, MD, FAAOS, FAOA, is chair of the Department of Orthopedic Surgery, holds the Shands/MacEwen Endowed Chair of Orthopedics, is the division chief of the Spine and Scoliosis Center, clinical fellowship director emeritus, and a pediatric orthopedic surgeon. He also serves as professor of orthopedic surgery and pediatrics at Sidney Kimmel Medical College at Thomas Jefferson University. Dr. Shah received his undergraduate degree in science from The Pennsylvania State University. He earned his medical degree from Sidney Kimmel Medical College at Thomas Jefferson University, completed an orthopedic surgery residency at Rothman Orthopaedic Institute at Thomas Jefferson University Hospital, and a fellowship in pediatric orthopedic surgery at Nemours Children's Hospital, Delaware. Dr. Shah is certified by the American Board of Orthopaedic Surgery. His clinical interests include adolescent idiopathic scoliosis, early onset scoliosis, complex spinal deformities, kyphosis, spondylolisthesis and other problems of the spine, minimally invasive techniques for surgery, and osteogenesis imperfecta.

Dr. Shah is an innovator, researcher and key opinion leader in the field of spinal deformity surgery, and he performs advanced deformity correction techniques, such as vertebral column resection (VCR) and vertebral body tethering (VBT). He is frequently invited to teach and lecture at national and international courses, educational symposia, and other institutions as a visiting professor. He is a prolific writer of more than 250 research publications in peer-reviewed journals, 40 book chapters and the textbook, *"The Management of Disorders of the Child's Cervical Spine."* He also serves as a reviewer for five medical journals. As a testament to his academic contribution and body of work, he's ranked among the top eight experts on scoliosis worldwide by Expertscape. He is a two-time recipient of the Russell A. Hibbs award and he's also received the Louis A. Goldstein and the Thomas E. Whitecloud awards — all from the Scoliosis Research Society (SRS) for excellence in spine and scoliosis research. Dr. Shah has been an SRS Traveling Fellow, an American Academy of Orthopaedic Surgeons Leadership Fellow, and an American Orthopaedic Association American-British-Canadian Traveling Fellow. He also completed a course on Leadership Development for Physicians in Academic Health Centers at the Harvard T.H. Chan School of Public Health. Dr. Shah continues to be recognized by *Best Doctors in America*, *Philadelphia Magazine* and *Delaware Today*.

Dr. Shah is vice president of the Scoliosis Research Society (SRS), served on the SRS Board of Directors as the education council chair, previously chaired the Education Committee, Program Committee, Growing Spine Committee and Safety & Value Committee, and he was director of the International Pediatric Orthopaedic Symposium. He is an active member of Pediatric Orthopaedic Society of North America (POSNA), American Academy of Orthopaedic Surgeons, American Orthopaedic Association, and the Pediatric Spine Study Group. In addition to his professional memberships, he is president of the Setting Scoliosis Straight Foundation and chair of the executive committee of the Harms Study Group, a group dedicated to supporting discoveries in scoliosis. **Dr. Shah provides care in Wilmington and Milford, Delaware**



**Alfred
Atanda Jr., MD**

Alfred Atanda Jr., MD, is the director of the Center for Sports Medicine, director of Clinician Well-Being, and a pediatric orthopedic surgeon and sports medicine specialist. He also serves as assistant professor of orthopedic surgery and pediatrics at Sidney Kimmel Medical College at Thomas Jefferson University in Philadelphia. Dr. Atanda received his undergraduate degree in biochemistry from the University of Virginia. He earned his medical degree from the University of Pennsylvania (Perelman) School of Medicine. He then completed an internship and orthopedic surgery residency at The University of Chicago Medical Center, and fellowships in pediatric orthopedic surgery at Nemours Children's Hospital, Delaware, and sports medicine at Rothman Orthopaedic Institute at Thomas Jefferson University. Dr. Atanda is certified by the American Board of Orthopaedic Surgery. His clinical interests include sports medicine, arthroscopic surgery of the knee, elbow, ankle and shoulder, general orthopedics, and surgical procedures related to trauma.

Dr. Atanda is an active member of the Pediatric Orthopaedic Society of North America (POSNA) and the American Medical Association. His research interests include upper-extremity overuse injury prevention and general orthopedic trauma. He has published many research articles and book chapters and presented at numerous national and international conferences. Dr. Atanda also has interests in technology and digital health innovation, and routinely uses telemedicine in his sports medicine practice. He actively works with clinical innovators, families, and health information specialists to reimagine the process by which pediatric orthopedic patients are triaged, navigated, evaluated, and treated during the continuum of their health care experience. **Dr. Atanda provides care in Wilmington, Delaware.**



**Robert P. Brislin,
DO**

Robert P. Brislin, DO, MEd, leads the musculoskeletal health program at Nemours Children's Health. His focus is on holistic therapies that complement the medical or surgical treatment children receive, aiding them in pain relief and other issues without the use of medication. Dr. Brislin provides medical acupuncture and osteopathic manual therapy and advises patients on areas such as posture and home exercises, nutrition, and sleep habits. Prior to his current role, he was a pediatric anesthesiologist at Nemours Children's, Delaware for almost 29 years, where he held the titles of Clinical Director of Anesthesia Services and Director of Pain Management.

Dr. Brislin is board-certified in anesthesiology with a subspecialty board certification in pediatric anesthesiology. He is also board-certified in medical acupuncture. **Dr. Brislin sees patients in Wilmington, Delaware and Glen Mills, Pennsylvania.**



**William A.
Emanuele, DO**

William A. Emanuele, DO, is a pediatric sports medicine physician. Dr. Emanuele received his undergraduate degree in biology from Arcadia University. He attended medical school at Lake Erie College of Osteopathic Medicine, then completed his internship and pediatric residency at Cooper University Hospital. Dr. Emanuele continued his training with a fellowship in sports medicine at University Hospitals Rainbow Babies & Children's Hospital, where he participated in the care of high school, college and professional athletes.

Dr. Emanuele is certified by the American Board of Pediatrics and holds subspecialty certification of advanced qualifications in sports medicine. His clinical interests include injuries in the throwing athlete, sports-related concussions, acute injuries, sprains and strains, chronic overuse injuries and stress fractures. Dr. Emanuele has been named a Top Doc for Kids by "South Jersey Magazine" and "SJ Mag" for several years. He is an active member of the American Medical Society of Sports Medicine. In his spare time, he enjoys golfing, fishing, and spending time with his family. **Dr. Emanuele provides care in Deptford, New Jersey and Wilmington, Delaware.**



**Emelynn
Fajardo, DO**

Emelynn Fajardo, DO, is a pediatric sports medicine physician. She received her undergraduate degree in biology from The College of New Jersey. She attended medical school at the Rowan University School of Osteopathic Medicine (formerly the University of Medicine and Dentistry of New Jersey). Dr. Fajardo continued her training with an internship and pediatric residency at Atlantic Health System's Goryeb Children's Hospital, and a fellowship in pediatric sports medicine at Jersey Shore University Medical Center. She was trained by one of the founding clinicians of primary care sports medicine, Dr. Stephen Rice. Dr. Fajardo is certified by the American Osteopathic Board of Pediatrics and the American Osteopathic Academy of Sports Medicine.

Dr. Fajardo's clinical interests include sport-related concussions, overuse injuries and stress fractures, the female athlete, and acute injuries. Prior to joining Nemours Children's, she worked as a sports medicine physician in private practice and served as school physician and team physician for a local high school in northern New Jersey. She has participated in the care of young athletes at sporting events, in schools, and in the private office setting. She is an active member of the American Medical Society for Sports Medicine, American College of Sports Medicine, American Academy of Pediatrics, and the American Osteopathic Association. **Dr. Fajardo provides care in Glen Mills, Pennsylvania and Wilmington, Delaware.**



**Jeanne M.
Franzone, MD**

Jeanne M. Franzone, MD, is the surgical director of the multidisciplinary Osteogenesis Imperfecta Program, co-director of the multidisciplinary prosthesis clinic, holds the Elizabeth W. Snyder Endowed Chair in Osteogenesis Imperfecta, and she is a pediatric orthopedic surgeon. She also serves as assistant professor of orthopedic surgery and pediatrics at Sidney Kimmel Medical College at Thomas Jefferson University. Dr. Franzone completed her undergraduate studies at Dartmouth College. She earned her medical degree from Columbia's Vagelos College of Physicians and Surgeons in New York City and completed an orthopedic surgery residency at Columbia University Irving Medical Center. She continued her training with fellowships in pediatric orthopedic surgery at Nemours Children's Hospital, Delaware and in pediatric limb lengthening and reconstruction at the International Center for Limb Lengthening in Baltimore. Dr. Franzone is certified by the American Board of Orthopaedic Surgery. Her clinical interests include osteogenesis imperfecta (OI), limb deformity and lengthening, and trauma.

Dr. Franzone leads the orthopedic aspect of the multidisciplinary osteogenesis imperfecta (OI) program at Nemours Children's, providing daily fracture care for OI patients, as well as performing upper and lower extremity OI rodding and reconstruction procedures. The OI team provides comprehensive OI patient care from the prenatal period through the age of 35. Dr. Franzone serves on the Medical Advisory Council of the Osteogenesis Imperfecta Foundation (OIF). She participates yearly in the OIF national conference and the scientific meeting. Dr. Franzone is the head faculty member of the OIF TeleECHO educational series. She is on the Scientific Advisory Board for the OIF Patient-Centered Outcomes Research Institute (PCORI) initiative regarding transition of OI care in young adulthood. Dr. Franzone is also co-chair of the International Society for Children's Bone Health New Investigator Network and the OI Virtual Quarterly Case Review for the OI Federation Europe, and she's an active member of the Limb Lengthening and Reconstruction Society. For 2024, she was also named the Pediatric Orthopaedic Society of North America's (POSNA) International Traveling Fellow. The primary focus of Dr. Franzone's research efforts include clinical and translational OI projects. She has published multiple research articles and book chapters and presented at numerous national and international conferences. **Dr. Franzone provides care in Wilmington, Delaware.**



**Peter G. Gabos,
MD**

Peter G. Gabos, MD, is co-director of the Spine and Scoliosis Center and a pediatric orthopedic surgeon. He serves as assistant professor of orthopedic surgery and pediatrics at Sidney Kimmel Medical College at Thomas Jefferson University. Dr. Gabos received his undergraduate degree in biology from Fairfield University. He earned his medical degree from New York University Grossman School of Medicine, completed his residency in orthopedic surgery at St. Luke's-Roosevelt Hospital Center, and a fellowship in pediatric orthopedic surgery at Nemours Children's Hospital, Delaware. Dr. Gabos is certified by the American Board of Orthopaedic Surgery and the National Board of Medical Examiners. His clinical interests include scoliosis, surgical correction of severe and complex spinal deformities, early-onset scoliosis, congenital scoliosis and thoracic insufficiency syndrome.

Dr. Gabos is co-founder of Spine Overseas and a member of the Global Outreach Mission, an outreach organization providing voluntary surgical care for children and adults with spinal and chest wall deformities in Central and South America. He is credited with performing the first expansion thoracoplasty/VEPTR procedure in Central America and trains international surgeons there in advanced spine surgery techniques. Dr. Gabos is an active member of the Pediatric Orthopaedic Society of North America (POSNA), American Academy of Orthopaedic Surgeons, and the Scoliosis Research Society. He is also a member of several internationally renowned study groups for chest wall and spinal deformity. He has published a multitude of research articles in peer-reviewed medical journals, contributed to major textbooks on spinal deformity and scoliosis, and he presents at numerous national and international conferences each year. In his spare time, Dr. Gabos enjoys spending time with his family and dogs, weight training, drawing and painting. He has been at Nemours Children's for his entire career and enjoys caring for children as if they were his own. His daily mantra is: "How may I serve?" **Dr. Gabos provides care in Wilmington, Delaware.**



**Jason Howard,
MD**

Jason Howard, MD, is a senior attending pediatric orthopedic surgeon. Dr. Howard received his undergraduate degree in electrical engineering from Memorial University of Newfoundland in Canada and a graduate degree in biodesign from Stanford University. He earned his medical degree from Memorial University, then completed an orthopedic surgery residency at the University of Calgary, followed by fellowships in pediatric orthopedic surgery at Royal Children's Hospital Melbourne in Australia, and another in pediatric spine and orthopedic surgery at Starship Children's Hospital in New Zealand. Dr. Howard is certified by the American Board of Orthopaedic Surgery and the Royal College of Physicians and Surgeons of Canada. His clinical interests include cerebral palsy, muscular dystrophies, spinal muscular atrophy, neuropathy (Charcot-Marie-Tooth disease), and other neuromuscular conditions. Prior to joining Nemours Children's, Dr. Howard was a pediatric orthopedic surgeon at Alberta Children's Hospital in Calgary and IWK Women and Children's Health Centre in Halifax. He also served as director of the C.H. Riddell Family Movement Assessment Centre (gait laboratory) and assistant professor of medicine at Dalhousie University. In 2014, Dr. Howard was appointed Chief of Orthopedic Surgery, Interim Chief of Rehabilitation Services and Director of Clinical Research at Sidra Medicine (Qatar) and assistant professor of orthopedic surgery at Weill Cornell Medical College in Qatar. He also developed the orthopedic and rehabilitation programs for Sidra Medicine and was a member of the leadership team that helped plan and activate this greenfield academic children's hospital.

Dr. Howard is an active member of the Pediatric Orthopaedic Society of North America (POSNA), American Academy of Orthopaedic Surgeons (AAOS), American Academy for Cerebral Palsy and Developmental Medicine, European Academy of Childhood Disability, Muscular Dystrophy Association, and the Canadian Orthopaedic Association. He is a global thought leader in cerebral palsy and has focused his research on the hip in neuromuscular diagnoses and the basic science of spastic muscle. He has written many peer-reviewed publications and book chapters and has presented at numerous national and international conferences. **Dr. Howard provides care in Wilmington, Delaware.**



**Richard W.
Kruse, DO, MBA**

Richard W. Kruse, DO, MBA, is a pediatric orthopedic surgeon. He serves as professor of orthopedic surgery and pediatrics at Sidney Kimmel Medical College at Thomas Jefferson University and the Uniformed Services University School of Medicine. Dr. Kruse received his undergraduate degree in biology from the University of Delaware and his graduate degree in business (MBA) from Wilmington College. He attended medical school at the Philadelphia College of Osteopathic Medicine, then completed an internship at Tripler Army Medical Center in Honolulu. He continued his training with an orthopedic surgery residency at Walter Reed Army Medical Center, followed by a pediatric orthopedic residency at Rocky Mountain Hospital for Children in Denver, and a pediatric orthopedic fellowship at Nemours Children's Hospital, Delaware. Dr. Kruse is certified by the American Academy of Orthopaedic Surgery. His clinical interests include orthopedic trauma and fractures, osteogenesis imperfecta, and sports rehabilitation and nutrition.

Dr. Kruse is a retired U.S. Army Colonel with combat and command experience of a U.S. Army Airborne Forward Surgical Team. He graduated from the U.S. Army Command and General Staff College and was selected as an Army attendee of the U.S. Air Force Air War College, the highest level of leadership education in the military. He is a fellow of the Pediatric Orthopaedic Society of North America (POSNA), American Academy of Orthopaedic Surgeons, American Orthopaedic Association, Orthopaedic Trauma Association, and the American Academy of Pediatrics. He serves on the Medical Advisory Council of the Osteogenesis Imperfecta Foundation (OIF) and he's a member of the American College of Sports Medicine. His personal interests include exercise and coaching young athletes, including a decade of experience coaching middle and high school cross-country and track and field. He holds specialty coaching certification from USA Track and Field. Dr. Kruse was the recipient of the National Coaching Award presented at Stanford University for his work with young athletes, and the St. John Bosco award from the Diocese of Wilmington, Delaware for his work with youth. He has published multiple articles and book chapters on various topics in pediatric orthopedics and trauma. He also lectures nationally and internationally at conferences. **Dr. Kruse provides care in Glen Mills, Pennsylvania and Milford, Delaware.**



**W.G. Stuart
Mackenzie, MD**

W.G. Stuart Mackenzie, MD, holds the Elizabeth W. Snyder Endowed Chair in skeletal dysplasia, serves as the clinical fellowship director, and he's a pediatric orthopedic surgeon. Dr. Mackenzie received his undergraduate degree from the University of Toronto and a graduate degree in medical nutrition from Boston University. He then spent two years in Africa working with HIV patients at the Centre for Infectious Disease Research in Zambia. Dr. Mackenzie earned his medical degree from New York Medical College, completed an orthopedic surgery residency at Columbia University Irving Medical Center and New York-Presbyterian Morgan Stanley Children's Hospital, followed by a fellowship in pediatric orthopedic surgery at Nemours Children's Hospital, Delaware.

Dr. Mackenzie is certified by the American Board of Orthopaedic Surgery. His clinical interests include skeletal dysplasia, scoliosis and spine deformity, and trauma. He is an active member of the Pediatric Orthopaedic Society of North America (POSNA), American Academy of Orthopaedic Surgeons, and the Scoliosis Research Society. He has published multiple journal articles and book chapters on pediatric spine deformity and presented at numerous national and international conferences. **Dr. Mackenzie provides care in Wilmington, Delaware and Orlando.**



**L. Reid Nichols,
MD**

L. Reid Nichols, MD, is co-director of the Clubfoot Clinic and the Arthrogryposis Program, and she's a pediatric orthopedic surgeon. She also serves as assistant professor of orthopedic surgery and pediatrics at Sidney Kimmel Medical College at Thomas Jefferson University. Dr. Nichols received her undergraduate degrees in religious studies from the University of Virginia, and in nursing from Johns Hopkins University School of Nursing. She earned her medical degree from the College of Medicine at Northeast Ohio Medical University, then completed an orthopedic surgery residency at Maimonides Medical Center in Brooklyn, followed by fellowships in pediatric limb lengthening and reconstruction with Dr. John Herzenberg at the International Center for Limb Lengthening's Rubin Institute for Advanced Orthopedics in Baltimore, and pediatric orthopedic surgery at Nemours Children's Hospital, Delaware. Under the supervision of Dr. Herzenberg — a master in the Ponseti technique — she received advanced training in the management and treatment of clubfoot.

Dr. Nichols is certified by the American Board of Orthopaedic Surgery. Her clinical interests include clubfoot, lower extremity arthrogryposis, limb deformity and reconstruction, and trauma. She is the past president of the Limb Lengthening and Reconstruction Society. She is also an active member of Pediatric Orthopaedic Society of North America (POSNA), American Academy of Orthopaedic Surgeons, American Orthopaedic Associates, Ruth Jackson Orthopaedic Society, and the American Medical Association. Dr. Nichols has published numerous research articles and book chapters as well as presented at multiple national and international conferences. **Dr. Nichols provides care in Wilmington, Delaware.**



**Brett A.
Shannon, MD**

Brett A. Shannon, MD, is the residency director and a pediatric orthopedic surgeon. He also serves as assistant professor of orthopedic surgery and pediatrics at Sidney Kimmel Medical College at Thomas Jefferson University. Dr. Shannon received his undergraduate degree in biological sciences and philosophy from the University of Notre Dame and his medical degree from Johns Hopkins University School of Medicine. He continued his training with an internship and orthopedic surgery residency at The Johns Hopkins Hospital, and a fellowship in pediatric orthopedic surgery at Boston Children's Hospital.

Dr. Shannon is certified by the American Board of Orthopaedic Surgery. His clinical interests include scoliosis and spinal deformity, hip disorders, and sports injuries. He is an active member of the Pediatric Orthopaedic Society of North America (POSNA), American Academy of Orthopaedic Surgeons, and the Pediatric Spine Foundation. Dr. Shannon has published multiple articles and book chapters, presented at national and international conferences, and was selected as the top pediatric orthopedist by Main Line Today. **Dr. Shannon provides care in Broomall and Malvern, Pennsylvania and Wilmington, Delaware.**



Wade Shrader, MD

Wade Shrader, MD, is the Division Chief and Director of the Center for Cerebral Palsy, holds the Freeman Miller Endowed Chair in cerebral palsy, and is a pediatric orthopedic surgeon. He also serves as professor of orthopedic surgery and pediatrics at Sidney Kimmel Medical College at Thomas Jefferson University. In addition to his condition expertise and clinical care, Dr. Shrader is also the medical director of the Gait and Motion Analysis Laboratory at Nemours Children's Hospital, Delaware. Dr. Shrader received his undergraduate degree in aerospace engineering from Mississippi State University. He earned his medical degree from the University of Chicago Pritzker School of Medicine, completed his orthopedic surgery residency at the Mayo Clinic, followed by a fellowship in pediatric orthopedic and scoliosis surgery at the Scottish Rite for Children Hospital in Dallas. Dr. Shrader is certified by the American Board of Orthopaedic Surgery. He is an international thought leader in the field of cerebral palsy (CP) and childhood onset disabilities. In addition to CP, his clinical interests include gait interpretation, neuromuscular scoliosis, and spina bifida.

Prior to joining Nemours Children's, Dr. Shrader was a pediatric orthopedic surgeon at Phoenix Children's Hospital and Children's Hospital of Mississippi, medical director of the Bubba Watson and PING Golf Motion Analysis Laboratory at Phoenix Children's, clinical assistant professor at the University of Arizona College of Medicine, and professor of orthopedic surgery at the University of Mississippi Medical Center. He is president of the American Academy of Cerebral Palsy and Developmental Medicine and an active member of the Pediatric Orthopaedic Society of North America (POSNA), American Academy of Orthopaedic Surgery (AAOS), Scoliosis Research Society, Gait and Clinical Motion Analysis Society, and the American Orthopaedic Association. Dr. Shrader is a former POSNA International Traveling Fellow and an AAOS Leadership Fellow. He has authored numerous research publications in peer-reviewed journals, written multiple book chapters, and presented at many national and international conferences. He is an associate editor for *Journal of the American Academy of Orthopaedic Surgeons* and *Journal of the Pediatric Orthopaedic Society of North America*. **Dr. Shrader provides care in Wilmington, Delaware and Malvern, Pennsylvania.**



Alvin Su, MD, PhD

Alvin Su, MD, PhD, is a fellowship-trained sports medicine surgeon and pediatric orthopedic surgeon, assistant professor of orthopedic surgery at Sidney Kimmel Medical College at Thomas Jefferson University, an adjunct professor of Biomedical Engineering at the University of Delaware, as well as a scientist passionate about translational orthopedic research. Before arriving at Nemours Children's, he completed two clinical fellowships in orthopedic sports medicine: one at Washington University in St. Louis and the other at the University of Pennsylvania. He also completed a clinical fellowship in pediatric orthopedics at the University of Connecticut/Connecticut Children's Medical Center. He earned his PhD in Materials Science & Engineering from the University of California, San Diego. He has authored numerous peer-reviewed journal articles, is a principal reviewer for the top-ranked American Journal of Sports Medicine (AJSM), is a member of the American Orthopaedic Society for Sports Medicine (AOSSM) and serves on the Research Committee for the Pediatric Orthopaedic Society of North America (POSNA). Dr. Su has particular interests in pediatric sports medicine regarding the prevention and treatment of sports injuries in young athletes. His clinical interests include sports medicine surgery such as arthroscopy of the knee, hip, shoulder, elbow and ankle; cartilage injury treatment; anterior cruciate ligament (ACL) and other ligamentous reconstruction; and general orthopedic and trauma procedures. His research interests include articular cartilage repair, population-based clinical outcome investigation, medical economics modeling, as well as translational scientific research in biomechanics and mechanobiology of cartilage impact injury. He also has keen interest in martial arts. His ultimate career goal is to promote the physical and mental health of young people by synergizing the merits that he learned from the East and the West — as an academic orthopedic surgeon, a father of two young children, a Taiwanese native, and an amateur martial artist. **Dr. Su provides care in Wilmington, Delaware and Deptford, New Jersey.**



**Mihir M.
Thacker, MD**

Mihir M. Thacker, MD, is a pediatric orthopedic surgeon. He also serves as a professor of orthopedic surgery and pediatrics at Sidney Kimmel Medical College of Thomas Jefferson University. Dr. Thacker went to the Seth G. S. Medical College in Mumbai, India and completed his orthopedic residency at Lokmanya Tilak Municipal General Hospital in Mumbai. He has had extensive subspecialty training through pediatric orthopedic fellowships at National University Hospital in Singapore, Hospital for Joint Diseases/New York University in New York, and Nemours Children's. He also completed a fellowship in musculoskeletal oncology at Jackson Memorial Hospital/University of Miami. Dr. Thacker's major clinical interest is bone and soft tissue tumors. He performs limb salvage surgery for tumors, including using noninvasive expandable (growing) prostheses. He is also interested in hip disorders in children and performs complex hip reconstruction (including surgical hip dislocations and peri-acetabular osteotomies), treatment of complex congenital anomalies, correction of complex deformities, and limb lengthening.

Dr. Thacker is active in teaching medical students, residents, fellows and international visiting observers. He is invited to lecture nationally and internationally and is a member of several societies including the Pediatric Orthopaedic Society of North America, Children's Oncology Group, Musculoskeletal Tumor Society, and Lower Limb Reconstruction Society. He is actively involved in research and has more than 30 peer-reviewed publications, five book chapters, and several national and international presentations at scientific conferences. Dr. Thacker has been selected by Delaware Today as one of the best surgeons in Delaware among both pediatric surgeons and surgical oncologists and was listed in Best Doctors in America. **Dr. Thacker provides care in Wilmington, Delaware.**



**Arianna Trionfo,
MD**

Arianna Trionfo, MD, is a pediatric orthopedic surgeon. Dr. Trionfo received her undergraduate degrees in biology and psychology from Loyola University Maryland. She earned her medical degree from Robert Wood Johnson Medical School/Rutgers, completed an orthopedic surgery residency at Temple University Hospital, and a fellowship in pediatric orthopedic surgery at Children's Hospital of Philadelphia. Dr. Trionfo is certified by the American Board of Orthopaedic Surgery. Her clinical interests include cerebral palsy and other neuromuscular conditions, hip dysplasia, and orthopedic trauma.

Prior to joining Nemours Children's, Dr. Trionfo was a pediatric orthopedic surgeon at St. Christopher's Hospital for Children and Shriner's Hospital for Children, and assistant professor of orthopedic surgery at Drexel University College of Medicine, all in Philadelphia. She is an active member of the Pediatric Orthopaedic Society of North America (POSNA), American Academy for Cerebral Palsy and Developmental Medicine, American Academy of Orthopaedic Surgeons, and the Ruth Jackson Orthopaedic Society. She serves as a mentor for female medical students and residents, is actively involved in clinical research, has authored several peer-reviewed publications and book chapters, and presents at numerous national and international conferences. **Dr. Trionfo provides care in Wilmington, Del., Milford, Del., and Deptford, N.J.**



**Jennifer M. Ty,
MD**

Jennifer M. Ty, MD, is a pediatric orthopedic surgeon. She received her undergraduate degree in biology and anthropology from Harvard University and earned her medical degree from UCLA David Geffen School of Medicine. Dr. Ty continued her training with a research year at the National Institutes of Health, an orthopedic surgery residency at Harvard University, and fellowships in both pediatric orthopedic surgery at Boston Children's Hospital and hand and microvascular surgery at the University of California San Francisco.

Dr. Ty is certified by the American Board of Orthopaedic Surgery. Her clinical interests include congenital hand conditions, brachial plexus birth palsy, and trauma of the upper extremity. She is an active member of the Pediatric Orthopaedic Society of North America (POSNA), American Academy of Orthopaedic Surgeons (AAOS), and the American Society for Surgery of the Hand. She has published many articles and book chapters as well as presented at numerous national and international conferences. **Dr. Ty provides care in Wilmington, Delaware and Glen Mills, Pennsylvania.**