

# Restoring Function with Cutting-Edge Approaches to Acquired and Congenital Abnormalities

## HAND SURGERY DIVISION

One of the most innovative clinical initiatives undertaken by NYU Langone’s Division of Hand Surgery in 2014 involved preparing for an event that hasn’t taken place yet: the Medical Center’s first hand transplant.

In collaboration with the Department of Plastic Surgery, the hand transplant team is training extensively on the procedure’s surgical techniques. At the same time, the division has assembled an interdisciplinary support team of plastic surgeons, psychiatrists and social workers, hand therapists, rehabilitation physicians, and transplant medicine specialists. “We’re now looking for the right surgical candidate,” explains Nader Paksima, DO, MPH, assistant chief of hand surgery. “This type of effort requires extensive resources and a deep bench of medical professionals—it can only happen at a large academic medical center like NYU Langone, along with the leadership and expertise of our plastic surgery colleagues.”

The hand transplant initiative brings a new capability to a program known for treating the most complex adult and pediatric upper-extremity conditions, including traumatic injuries (the division staffs Bellevue Hospital Center and Jamaica Hospital Medical Center, the two busiest Level 1 Trauma Centers in New York City), post-traumatic and arthritic deformities, congenital deformities, neuromuscular disorders, and acquired problems such as nerve compressions and tumors. Its surgical and nonoperative treatments are supported by in-office fluoroscopy and EOS®

technology (which provides full-body diagnostic x-rays with one-tenth the radiation of traditional x-rays), as well as state-of-the-art MRI imaging. In-house certified hand therapists participate in all pre- and postsurgical evaluations and provide onsite splinting and rehabilitation services as needed. The division also maintains an outstanding educational program that includes three clinical fellows, two research fellows, and two residents at all times completing a two-month rotation.

In other 2014 developments, the division augmented its congenital neuromuscular program with the recruitment of [S. Steven Yang, MD, MPH](#), an expert in treating congenital hand abnormalities in children, and made preparations to launch a new interdisciplinary program for patients with upper-extremity amputations that will use state-of-the-art computerized prostheses. The division also conducted research on treatment of distal radius, metacarpal, and phalangeal fractures as well as nerve repair, and continued building its online patient database—a recently established clinical research tool that tracks functional outcomes and quality-of-life assessments for all hand surgery patients.

### 2014 Highlights

- Performed more than 2,400 procedures.
- Established a hand transplant program with the Plastic Surgery Department.
- Recruited an expert on congenital abnormalities of the hand.
- Launched a new program for the treatment of upper-limb amputees.
- S. Steven Yang, MD, named American Society for Surgery of the Hand traveling international fellow.

## The Emanuel Kaplan Fellowship

includes three clinical hand surgery fellows and two research fellows

### HAND SURGERY BY THE NUMBERS

Led for over 42 years by its chief, Martin Posner, MD, NYU Langone’s Division of Hand Surgery is one of the largest in the nation. In 2014, its 15 faculty members performed 2,428 procedures—up 14 percent from the year before.