



Penn Extremity Reconstructive Institute (PERI)

Stephen J. Kovach, III, MD

Assistant Professor, University of Pennsylvania Division of Plastic and Reconstructive Surgery



Patients with injured extremities benefit from multidisciplinary care. This concept is not a new one, but the concept of a comprehensive institute dedicated to the treatment of patients with injuries to their extremities under one roof is an idea that is being developed at Penn. The Penn Extremity Reconstructive Institute will serve as a multidisciplinary institute dedicated to the treatment

of acquired and congenital deformities of the upper and lower extremity. The institute will be dedicated to preserve and restore the form and function of the extremities in a multidisciplinary setting and encompass a broad spectrum of specialties within the University of Pennsylvania Health System in an effort to best treat patients with injured extremities.

Injuries and deformities of the upper and lower extremity may result in significant impediment to the patient, loss of work, inability to interact with the surrounding environment, and persistent pain. The majority of upper and lower extremity deformity and injury will result from trauma, oncologic resection, degenerative disease, and vascular disease. The sequelae of prior extremity injuries including nonunion, malunion, and non-healing wounds also remain a formidable problem for many patients. These patients are best served in a multidisciplinary setting where they would benefit from staged reconstruction. Additionally, infections of the musculoskeletal system including osteomyelitis require aggressive treatment and ultimately, many patients require bony and soft tissue reconstruction for optimal outcome. These are the patients and issues that the proposed institute wishes to address with input and management from the contributing specialties.

Currently, the University of Pennsylvania treats patients across a wide discipline of specialties that involve the upper

and lower extremity. Orthopaedic surgery, plastic surgery, orthopaedic oncology, trauma and critical care, vascular surgery, and podiatry all routinely treat patients with injuries and deformities of the upper and lower extremity. Additionally, the University of Pennsylvania functions as the referral center for complex microsurgical reconstruction of the extremity in the region. The Penn Extremity Reconstructive Institute would capitalize and build upon existing relationships and referral patterns to grow Penn's presence for patients in need of surgical care of their extremities both in the acute and delayed setting.

The Penn Extremity Reconstructive Institute will ideally serve as a means to integrate care of the patient with upper and lower extremity injury or deformity. The Institute will serve as a regional, national, and potentially international referral center for patients with complex problems of the upper and lower extremity to the University of Pennsylvania Health System. The multidisciplinary nature of the Institute will require the support of additional specialties across multiple platforms. These would include infectious disease, radiation oncology, hyperbaric medicine, pain management, physical medicine and rehabilitation, psychiatry, and orthotics and prosthetics.

There is currently no integrated, multidisciplinary extremity reconstructive institute in the northeast. The Penn Extremity Reconstructive Institute would function as a referral center for a wide geographic area. The Penn Extremity Reconstructive Institute would function to increase patient volume within the participating specialties and effectively treat extremity patients in a cost efficient manner while improving functional and aesthetic outcomes in patients with injuries, tumors, acquired deformity, degenerative disease, or vascular disease of the upper and lower extremity.

With the aid of the participating specialties and the University of Pennsylvania Health System, we hope to make this vision a reality for patient care in the near future.