

Kamil Erfanian, MD

Curriculum Vitae

EDUCATION

Fellowship/Clinical Instructor, Hand & Microsurgery
University of Southern California, August 2006 - July 2007

Chief Resident, Plastic & Reconstructive Surgery
University of North Carolina, Chapel Hill, July 2005–June 2006

Resident, Plastic & Reconstructive Surgery
University of North Carolina, Chapel Hill, July 2004-June 2005

Chief Resident, Instructor in General Surgery
Brown University/Rhode Island Hospital, June 2003- June 2004

Resident, General Surgery
Brown University/Rhode Island Hospital, June 2000- June 2003

Internship, General Surgery
Brown University/Rhode Island Hospital, June 1999-June 2000

M.D., Doctor of Medicine, Tufts University School of Medicine, 1995-1999

M.S., Electrical Engineering, University of California at Los Angeles, 1993-1995

B.S., Electrical Engineering, University of California at Irvine, 1989-1993

BOARD CERTIFICATION

Certified, Subspecialty of Surgery of the Hand (CAQ), September 2010,
Certificate Number 632

Certified, American Board of Plastic Surgery, November 2008, Certificate Number 7426

Certified, American Board of Surgery, June 2005, Certificate Number 50252

LICENSURE

North Carolina, License Number 200401629, Issued 12/04, Exp 9/20/2011

California, License Number, A93715, Issued 1/6/2006, Exp 9/30/2011

Montana, License Number, 10993, Issued 12/20/2006, Exp 3/31/2006

PROFESSIONAL EXPERIENCE

University of North Carolina, Chapel Hill
Assistant Clinical Professor of Surgery
Director of the Hand Center
Division of Plastic & Reconstructive Surgery and Surgery of the Hand,
September 2007-Present

HONORS & AWARDS

University of North Carolina, Chapel Hill
UNC Plastic and Reconstructive Surgery,
Outstanding Teacher Award for Excellence in Resident Education, June 2009

Brown University School of Medicine/Rhode Island Hospital
Humanitarian Award, 2004
Young Investigator's Award, Rhode Island Hospital, 2002
Brian A. Dorman, MD, Surgical Education Award in recognition of Best Clinical
Paper, 2001-2002

Tufts University School of Medicine
Alpha Omega Alpha
Martin J. Loeb Memorial Prize in Surgery

University of California at Irvine
Cum Laude
Robert M. Saunders, Dean of the School of Engineering Award
Tau Beta Pi, National Engineering Honor Society
University of California Regent's Scholarship
Chancellor's Scholarship

BIBLIOGRAPHY

Hultman CS, **Erfanian K**, Fraser J, Thornton SJ, Calvert CS, Cairns BA.
Comprehensive management of hot-press hand injuries: long-term outcomes following
reconstruction and rehabilitation. *Annals of Plastic Surgery*, May 2010; 64(5):553-8.

Erfanian K, Luks FI, Kurkchubasche AG, Wesselhoeft CW Jr, Tracy TF Jr. In-line
image projection accelerates task performance in laparoscopic appendectomy. *Journal of
Pediatric Surgery*, July 2003; 38(7):1059-62.

Bedri S, **Erfanian K**, Schwaizberg S, Tischler AS. Mature cystic teratoma involving
adrenal gland. *Endocr Pathol*. 2002 Spring;13(1):59-64.

Erfanian K, Schwaizberg, S. The Use of Closed Suction in the Treatment of Necrotizing
Fasciitis: Report of a Case and Review of the Literature. *Contemporary Surgery*, 1999

POSTER PRESENTATIONS

“In-Line Image Projection Improves Task Performance in Laparoscopic Appendectomy”,
Kamil Erfanian, Francois I. Luks, Arlet Kurkchubasche, Conrad Wesselhoeft, Thomas
Tracy, Journal of Pediatric Surgery, 2002

Poster Presentation

Annual Pediatric Surgical Society Meeting, Phoenix, Arizona, 5/2002

“In-Line Image Projection Improves Task Performance in Laparoscopic Appendectomy”,
Kamil Erfanian, Francois I. Luks, Arlet Kurkchubasche, Conrad Wesselhoeft, Thomas
Tracy, Journal of Pediatric Surgery, 2002

Finalist in Young Investigator’s Poster Presentations

Rhode Island Hospital, Providence, Rhode Island, 4/2001

TEACHING RECORD

Hand Conference, UNC Chapel Hill

Weekly hand conference is offered to the resident staff in the Division of Plastic
and Reconstructive Surgery and Surgery of the Hand. This includes didactic
presentations prepared on topics as listed below:

Extensor Tendon Injuries

Flexor Tendon Injuries

Flexor Tendon Reconstruction

Metacarpal Fractures

Phalangeal Fractures

Thumb Fractures

Fracture Dislocations of the Hand

Hand Infections

Dupuytren’s Disease

Tenosynovitis

The Perionychium

The Stiff Finger

Nerve Compression

Rheumatoid Arthritis

Hand Dislocations

Congenital Thumb Disorders

Tendon Transfers

Arthroplasty and Arthrodesis of the Small Joints of the Hand

Hand Amputations

Soft Tissue Coverage of the Upper Extremity
In-Service Examination Review

Plastic Surgery Conference

Didactic presentations offered to plastic surgery residents based on Grabb and Smith textbook or Selected Readings in plastic surgery:

Lower Extremity Reconstruction

Microsurgery

Head and Neck Cancer Evaluation and Management

Infections of the Upper Limb

Tendon Healing and Flexor Tendon Surgery

Tenosynovitis

Repair of Extensor Tendon System

Fractures, Dislocations and Ligamentous Injuries of the Hand

Principles of Upper Limb Surgery

Radiologic Imaging of the Hand and Wrist

Fractures of the Carpal Bones

Combined Orthopedic and Plastic Surgery Resident Hand Conference

Didactic presentations on the following topics were offered to residents of both orthopaedic surgery departments and plastic surgery division:

Vascular Disorders of the Upper Extremity

Tenosynovitis

Nerve Compression

Rheumatoid Arthritis

Fingertip Amputations and Flaps

Acute Hand Infections

Medical Student Lectures

Management of Common Injuries of the Hand

Emergency Department Resident Lecture

Management of Common Injuries of the Hand

Grand Rounds Presentations

“The History, Training and Practice of Hand Surgery”

Department of Surgery, UNC, February 2011

“Current Management of Carpal Tunnel Syndrome”

Department of Physical Medicine and Rehabilitation, UNC, April 2009

Continuing Education Lectures

AHEC, Head and Neck Cancer Reconstruction, 2010

AHEC, Management of Hand Trauma, 2008

Clinical Teaching

Attending on Clinical Service, 2007-present.

Clinical and Surgical Anatomy, Fourth Year Student Elective, Department of Gross Anatomy, UNC, October – December, 2009 and 2010

Offered to fourth year medical students pursuing a surgical or medical subspecialty. Responsibilities include instruction in clinical anatomy, surgical anatomy and supervision of surgical procedures performed on cadaver specimens in preparation for a residency in the surgical or nonsurgical fields.

Microvascular Training, Offered to plastic surgery residents, 2009

PROFESSIONAL SERVICE

Director of UNC Hand and Rehabilitation Center

REFLECTIVE STATEMENT

My practice and area of interest lie in hand surgery, microsurgery and reconstructive plastic surgery. After completing residency training in general surgery at Brown University, plastic surgery at the University of North Carolina at Chapel Hill, and fellowship training in hand and microsurgery at the University of Southern California, I decided to return to the University of North Carolina. Over the last three and one half years, I have focused my practice on hand surgery and microsurgical reconstruction of breast, head and neck and extremity cancer and the trauma patient. My practice involves care of the patient with penetrating and non-penetrating injuries to the hand and wrist including fractures, lacerations involving tendons, nerves, blood vessels, nerve compression syndromes, tumors of the hand, treatment of arthritic conditions of the hand among many numerous hand related problems. This has afforded me the opportunity to be directly involved with resident education both in the operating theater, clinic or conferences. Teaching is paramount in my practice, which involves daily teaching of residents in plastic surgery during walk rounds management of the patient with the problems outlined above and in the operating room, technical instruction of the resident staff including hand surgery, microsurgery, and flap surgery. I am also involved in the education of interns from orthopedic surgery, otolaryngology, and oral maxillofacial surgery to name a few, specifically principles of surgical technique. I feel humbled to have received the UNC Plastic and Reconstructive Surgery Outstanding Teacher Award

for Excellence in Resident Education awarded by the Chief Residents in 2009. I am actively involved in resident education on a weekly basis as facilitator for the resident hand conference, participation and facilitating monthly Journal Club, Indications Conference, and Plastic Surgery Grand Rounds. I have spent inordinate hours preparing weekly conference topics for the hand conference I facilitate in power point format which lends itself to active learning. Publications include “Comprehensive management of hot-press hand injuries: long-term outcomes following reconstruction and rehabilitation”, as co-author with Scott Hultman in the Annals of Plastic Surgery and to be submitted to the Journal of Hand Surgery, “Fibroma of the Tendon Sheath: A Case Series and Review of the Literature” as senior author.

When deciding to pursue a career in medicine, it became clear to me that I could not imagine working outside of the academic environment. Having spent eight years in post-graduate training, it afforded me ample opportunity to teach medical students and residents in informal and formal settings. I believe teaching is exciting, but it need not be in a format that has been tried and found to be wanting. For example, often times, lectures are “given” to students. This implies students are a receptacle and it is the duty of the “all-knowing” instructor to fill that receptacle. I believe this passive form of learning is limited, diminishes the value we credit the trainee and is less effective and likely the reason why retention of the information is equally limited by students and residents in training.

In this light, my approach to teaching medical students and residents number three. First, in contrast to the methods previously used, where the student assumes a passive role, I have attempted to incorporate active learning in the talks and presentations so that those in attendance feel they are a part of the process of learning as opposed to affording them the opportunity to disconnect themselves from both the instructor and the information presented while in a passive role. Therefore, questions are posed, albeit simple, to allow one learn more smoothly and the questions are repeated in a different format to perhaps solidify one’s understanding. I view the talks as conversations as opposed to a one way road.

Second, having an engineering background has helped me to approach problems a little differently. Instead of depending on rote memorization, in engineering, one has to understand the fundamentals, the basic building blocks, and apply them in order to solve a difficult problem. Unless this is done, then memorization ultimately is doomed to fail. Therefore, acquisition of knowledge may be more fundamental and sound. For example, it is difficult to memorize all the muscles, nerves, and bones of the upper extremity, let alone solve the problem of localizing a functional loss in a traumatic injury of the hand or arm. However, if one divides the muscle groups, knowing the origin and insertion allows one the opportunity to understand the function of the muscle much more lucidly than by rote memorization. Or, understanding that the pathophysiology of acute appendicitis is similar though not identical to acute cholecystitis or a failed free flap, is at the core of using the building blocks of making a diagnosis and forming a treatment plan. I see my role being a facilitator, rather than instructor, in the process of medical student or resident education so that they may recognize patterns in disease processes from the fundamental building blocks of what they have learned in medical school and residency.

Third, I believe all too often the educational process has been linked to fear and has been almost confrontational for the trainee especially in the post-graduate years. In my training in general surgery, it was customary to be scolded and I felt that my educators felt it imperative and their duty to instill fear in order to educate. I believe that in education, we are advancing, and students and residents learn differently now, and all learn better when learning is properly motivated. Instead of learning out fear of embarrassment, one may find themselves learning in order to better care for a patient, raising the standard to a higher level. In this regard, there will not be a disconnect between the physician who has acquired sufficient knowledge, but does so for personal gain such as demonstration of one's knowledge to one's peers, instead of offering it as a service to the patient. This may yield better physician-patient relationships when one is helping one's patient understand the risks and benefits of a procedure. From this vantage point, I attempt to facilitate didactics are held in a problem-based manner, focusing the trainee always on the care of the patient. From talks to small group formats, whether in the gross anatomy laboratory with fourth year students taking Surgical Anatomy or in weekly Resident Hand Conference, I attempt to employ the problem-based format focusing the student or resident on the care of the patient and on solving the problem for the patient. In this manner, the mind is engaged, the motives are clear and it may become natural in the clinic, the emergency department and operating theater to translate that which was learned to clinical practice. Furthermore, I ask our resident staff to explain what they have learned to each other and students and students to make presentations and I serve as a facilitator. This is done by fourth year students in the gross anatomy course I facilitate presenting surgical procedures of their interest to other students. I believe this active learning is more effective.

My vision for the future is to develop computer-based learning modules that are problem-based. This may begin with a clinical presentation of a patient which will be followed by questions as one would see in clinical practice and board examinations. The hope being that the resident or student can by repetition and by active learning on an individual basis and in the privacy of their own computer terminal learn and test themselves. This may prove beneficial in learning to apply the fundamental building blocks of knowledge to clinical practice. I look forward to a productive future and my involvement in medical student and resident education here at the University of North Carolina.