CURRICULUM VITAE

David Borden Shapiro, M. D.

OFFICE ADDRESS Cleveland Clinic Foundation - Lorain

> 5800 Cooper Foster Park Lorain, OH 44053 (440) 204-7800

EDUCATION Case Western Reserve University

Western Reserve College

Cleveland, Ohio BA -- Natural Sciences magna cum laude

August 1978 to January 1982

Case Western Reserve University

School of Medicine Cleveland, Ohio

MD -- August 1982 to May 1986

POSTGRADUATE TRAINING Intern, General Surgery

Hospital of the University of Pennsylvania

June 1986 to June 1987

Resident, Orthopaedic Surgery

Hospital of the University of Pennsylvania

July 1987 to June 1991

Fellow, Hand and Upper Extremity Surgery

Department of Orthopaedic Surgery Hospital of the University of Pennsylvania

July 1991 to July 1992

FACULTY & PROFESSIONAL **Assistant Clinical Instructor**

APPOINTMENTS General Surgery

University of Pennsylvania, 1986-1987

FACULTY & PROFESSIONAL Assistant Clinical Instructor APPOINTMENTS (contd.)

Orthopaedic Surgery

University of Pennsylvania

1987-1992

Contributing Editor, The Journal of Hand Surgery

January 1995 to January 1996

LICENSURE Pennsylvania Medical License: MD 040029E

Ohio Medical License: 63552

National Board diplomate, 1987

American Board of Orthopaedic Surgery diplomate

Part I, July 1991: Pass Part II, July 1994: Pass

Recertification 2003, expires in 2015

Certificate of Added Qualification (CAQ) in Hand Surgery, 1995

CAQ in Hand Surgery, recertification, 2003

AWARDS Dean's List

Case Western Reserve University

1978-1982

Ohio Merit Scholar

1978-1982

Richard Reichert Memorial Award

(Community Service)

1981

HONORARY SOCIETIES Phi Beta Kappa (Alpha of Ohio)

Case Western Reserve University, 1981

Mortar Board

Case Western Reserve University, 1982

Alpha Omega Alpha

National Medical Honor Society, 1986

COMMITTEE ASSIGNMENTS
AND OTHER ACTIVITIES

President, Beta Nu Chapter of Theta Chi Fraternity

Case Western Reserve University, 1981

President, Interfraternity and Sorority Council

Case Western Reserve University, 1980

Prosector and Tutor, Anatomy and Physiology Case Western Reserve University, School of

Medicine, 1984-1985

COMMITTEE ASSIGNMENTS
AND OTHER ACTIVITIES

Course Chairman

AND OTHER ACTIVITIES (Continued)

Digital Imaging and Computer Training Program

American Society for Surgery of the Hand

2004 to 2008

PROFESSIONAL SOCIETIES

American Academy of Orthopaedic Surgeons

American Society for Surgery of the Hand

American Medical Association

Ohio State Medical Association Cuyahoga County Medical Society Northern Ohio Medical Association

RESEARCH PRESENTATIONS

Shapiro DB, Brighton CT, Clark CC, Spindler KP, Okereke E: Capacitively coupled electrical stimulation of in vitro bone cells in 3 and 21 percent oxygen. Poster presented at the Orthopaedic Research Society, Las Vegas, Nevada, 1989.

Osterman AL, Shapiro DB, Stern PJ, Nunley JA, Bednar JM, Lubahn JD, Fragner PD: One bone forearm-the ultimate salvage. Presented at the 47th Annual meeting of the American Society for Surgery of the Hand, Phoenix, AZ, November, 1992.

PUBLICATIONS

Manuscripts

Spindler, KP, Shapiro, DB, Gross, SB, Brighton, CT, Clark, CC: The effect of ascorbic acid on the metabolism of rat calvarial bone cells in vitro. The Journal of Orthopaedic Research 7:696-701, 1989.

Brighton CT, Schaffer JL, Shapiro DB, Tang JS: Proliferation and macromolecular synthesis of rat calvarial bone cells grown in various oxygen tensions. The Journal of Orthopaedic Research 9:847-54, 1991.

Guerra JJ, Shapiro DB: Diagnosis and treatment of the carpal tunnel syndrome. Hospital Physician 28(4):29-41, 1992.

Shapiro DB, Osterman AL, Chu JA: Carpal tunnel syndrome, tarsal tunnel syndrome, and double-crush syndrome and their relationship to trauma. In WH Simon and GE Ehrlich (eds.) Medicolegal Consequences of Trauma, Marcel Dekker, Inc., New York, pages 215-254, 1993.

Shapiro DB: Postoperative infection in hand surgery: Cause, prevention, and treatment. Hand Clinics of North America 10(1):1-12, 1994.

Shapiro DB: Postoperative infection in hand surgery: Cause, prevention, and treatment. Hand Clinics of North America 14(4):669-681, 1998.

Bickel B, Shapiro DB, Keith MW, Hoyen HA: The management of extensor tendon injuries in Chung KC (ed.) Hand an Upper Extremity Reconstruction, Saunders/Elsevier, New York, pages 47-60, 2009.

Shapiro DB, Krahe MA: Repair following traumatic extensor tendon disruption in the hand, wrist, and forearm in Wiesel SW (ed.) Operative Techniques in Orthopaedic Surgery, Wolters-Kluwer/Lippincott Williams & Wilkins, pages 2577-2586, 2011.

Abstracts

Baum, M, Connors, M, Shapiro, DB, Smith, MC: Comparison of prostacycline, a stable prostacycline analog, and heparin during canine hemodialysis. Kidney International 25:181, 1984.

Shapiro, DB, Brighton, CT, Clark, CC, Spindler, DP, Okereke, E: Capacitively coupled electrical stimulation of in vitro bone cells in 3 and 21 percent oxygen. Transactions of the Orthopaedic Research Society 14:114, 1989.

Smith, MC, Shapiro, DB, Connors, M: Effect of graded renal insufficiency on platelet function and vascular prostacycline (PGI2) production. Kidney International 25:252, 1984.

OTHER PRESENTATIONS

Endoscopic and Arthroscopic Techniques in Hand Surgery. Presented at the "Trends in Surgery" Conference at Lorain Community Hospital, Lorain, Ohio, September 18, 1993.

Carpal Tunnel Syndrome: Why my hands fall asleep and I don't. Presented to the Western Reserve Chapter of the American Society of Medical Transcriptionists. Lorain Community/St. Joseph Medical Center, Lorain, Ohio, October 15, 1994.

Acute Management of Upper Extremity Injuries in Athletes. 14th Annual Kolczun & Kolczun Sports Medicine Seminar. Vermilion High School, Vermilion, Ohio, August 2, 1996.

Emergency room splinting and wound care. Community Health Partners Hospital, Lorain, Ohio, November 30, 2000.

What's new in arthritis: Osteoarthritis in the hand and wrist, Sponsored by Lorain County Medical Society, Lorain County Community College, Elyria, Ohio, January 12, 2001.

Wrist fractures and instabilities – Surgical reconstruction. "Shoulder, Elbow and Hand Update 2001 Rehabilitation Symposium", Cleveland Clinic Foundation, Independence, Ohio, September 15, 2001.

Surgical reconstruction of the arthritic hand and wrist. "Shoulder, Elbow and Hand Update 2001 Rehabilitation Symposium", Cleveland Clinic Foundation, Independence, Ohio, September 15, 2001.

PIP joint reconstruction: Acute and chronic. "Current Technology in Upper Extremity Reconstruction – The Cutting Edge: An Educational Forum for Orthopaedic Surgeons," Lutheran Hospital / Cleveland Orthopaedic and Spine Hospital, Cleveland, Ohio, June 21, 2002.

Wrist Disruptions. "Current Technology in Upper Extremity Reconstruction – The Cutting Edge: An Educational Forum for Orthopaedic Surgeons," Lutheran Hospital / Cleveland Orthopaedic and Spine Hospital, Cleveland, Ohio, June 21, 2002.

Biomechanics and fracture management in the hand. "Current Technology in Upper Extremity Reconstruction – The Cutting Edge: An Educational Forum for Orthopaedic Surgeons," Lutheran Hospital / Cleveland Orthopaedic and Spine Hospital, Cleveland, Ohio, June 21, 2002.

Proximal interphalangeal joint fractures and dislocations. "Second Annual Rehabilitation Symposium: Hand, Shoulder, and Elbow Update 2002," Cleveland Clinic Foundation, Dept. of Orthopaedics, Cleveland, Ohio, September 5-7, 2002.

Triangular fibrocartilage anatomy and injury. "Second Annual Rehabilitation Symposium: Hand, Shoulder, and Elbow Update 2002," Cleveland Clinic Foundation, Dept. of Orthopaedics, Cleveland, Ohio, September 5-7, 2002.

Wrist instability. "Second Annual Rehabilitation Symposium: Hand, Shoulder, and Elbow Update 2002," Cleveland Clinic Foundation, Dept. of Orthopaedics, Cleveland, Ohio, September 5-7, 2002.

Case Presentation: 8 year old boy with a palmar mass. Presented at the Reich Lecture conference, Lutheran Hospital, Cleveland, Ohio, April 2, 2004

Wrist MRI: Is it useful. "Second annual Cleveland Combined Hand Fellowship Conference: Pitfalls and Difficult Problems in Hand Surgery", The Walker Center, Cleveland, Ohio, April 30, 2004

Small joint reconstruction: The evolution of implants and rehabilitation. "2004 – New Technology in Upper Extremity Surgery: The Cutting Edge". Sponsored by the Cleveland Clinic Center for Continuing Education and the Cleveland Orthopaedic and Spine Hospital. July 16, 2004, Cleveland, OH

CMC reconstruction: State of the art 2004. "2004 – New Technology in Upper Extremity Surgery: The Cutting Edge". Sponsored by the Cleveland Clinic Center for Continuing Education and the Cleveland Orthopaedic and Spine Hospital. July 16, 2004, Cleveland, OH

Digital imaging for beginners. American Society for Surgery of the Hand, 59th Annual meeting. September 9, 2004. New York, NY.

Anatomy and physical examination of the hand and wrist. Orthopaedics for the Primary Care Physician and Health Care Provider. Sponsored by the Cleveland Clinic Department of Orthopaedic Surgery. October 23, 2004. Cleveland, OH

Trauma to the hand and wrist. Orthopaedics for the Primary Care Physician and Health Care Provider. Sponsored by the Cleveland Clinic Department of Orthopaedic Surgery. October 23, 2004. Cleveland, OH.

CMC Arthroplasty: Where we are today. "2005 – New Technology in Upper Extremity Surgery: The Cutting Edge". Sponsored by the Cleveland Clinic Foundation and the Cleveland Orthopaedic and Spine Hospital. June 3, 2005, Cleveland, OH

Advanced digital image editing: Problem solving for the hobbyist. American Society for Surgery of the Hand, 60th Annual Meeting. Presented with Lawrence Haas and Amy Ladd. September 22, 2005, San Antonio, TX.

Basic digital image editing: Where do I start? American Society for Surgery of the Hand, 60th Annual Meeting. Presented with Lawrence Haas. September 23, 2005, San Antonio, TX.

Intermediate digital image editing: What's next? American Society for Surgery of the Hand, 60th Annual Meeting. Presented with Lawrence Haas. September 23, 2005, San Antonio, TX.

Hand and wrist arthritis. CCF sponsored Health Talk. Sawmill Creek, Ohio, November 9, 2005.

Ganglion cysts in the hand and wrist. Doctors Demystify the Wrist. Cleveland Clinic, Cleveland, Ohio, April 8, 2006.

Physical examination for the hand. Doctors Demystify the Wrist. Cleveland Clinic, Cleveland, Ohio, April 8, 2006.

Ligament injuries in the hand and wrist. Doctors Demystify the Wrist. Cleveland Clinic, Cleveland, Ohio, April 8, 2006.

Locking plate technology for fracture fixation: Application, experience and new directions. New Technology in Upper Extremity Surgery: The Cutting Edge. Cleveland Clinic Foundation and Lutheran Hospital, Cleveland, OH, May 31, 2006.

Basic digital image editing: Where do I start? American Society for Surgery of the Hand, 61st Annual Meeting. Presented with Jeffrey Lawton. September 8, 2006. Washington D.C.

Intermediate digital image editing: What's next? American Society for Surgery of the Hand, 61st Annual Meeting. Presented with Lawrence Haas. September 8, 2006. Washington D.C.

Thumb tendon injuries. Doctors Demystify the Thumb. Cleveland Clinic, Cleveland, Ohio, April 28, 2007.

Fractures around the thumb. Doctors Demystify the Thumb. Cleveland Clinic, Cleveland, Ohio, April 28, 2007.

Anatomy and physical examination of the hand and wrist. Jaworski Physical Therapy Upper Extremity Symposium, Elyria, Ohio, March 10, 2007.

Wrist Ligament Injuries. Jaworski Physical Therapy Upper Extremity Symposium, Elyria, Ohio, March 10, 2007.

Kienbock's disease: Current treatment strategies. New Technology in Upper Extremity Surgery: The Cutting Edge. Cleveland Clinic and Lutheran Hospital, Cleveland, Ohio, May 31, 2007.

Basic digital image editing. American Society for Surgery of the Hand, 62nd Annual Meeting. Presented with Jeffrey Lawton. September 28, 2007. Seattle, Washingon.

Intermediate digital image editing. American Society for Surgery of the Hand, 62nd Annual Meeting. Presented with Lawrence Haas. September 28, 2007. Seattle, Washington.

Using digital imaging to enhance your presentations in neurology and psychiatry. American Osteopathic Association Annual Meeting / American College of Neuropsychiatrists. October 1, 2007, San Diego, California.

Principles of Locked Plating in the Upper Extremity. Upper extremity fracture fixation course, Cleveland Skating Club, Cleveland, Ohio. November 15, 2007.

Imaging of the elbow. Doctors Demystify the Elbow. Cleveland Clinic, Cleveland, Ohio, April 26, 2008.

Biceps and triceps ruptures. Doctors Demystify the Elbow. Cleveland Clinic, Cleveland, Ohio, April 26, 2008.

Researching hand surgery literature: Using today's tools to unearth a comprehensive review. 2008 New Technology in upper extremity surgery: The cutting edge. Lutheran Hospital – Cleveland Clinic, Cleveland, Ohio. May 1, 2008.

Intermediate digital image editing. American Society for Surgery of the Hand, 62nd Annual Meeting. Presented with Lawrence Haas. Chicago, IL, September 27, 2008.

Hand pain and paresthesia. Pain management for the primary care physician. Cleveland Clinic Foundation, Department of Pain Management. Cleveland, Ohio, October 11, 2008.

Cervical Radiculopathy and Thoracic Outlet Syndrome. Doctors Demystify Periphernal Nerve Compression Syndromes. Cleveland Clinic, Cleveland, Ohio, May 2, 2009.

Social bookmarking for surgeons: To share is human. 2009 New Technology in upper extremity surgery: The cutting edge. Lutheran Hospital – Cleveland Clinic, Cleveland, Ohio, June 26, 2009.

Reduction strategies for distal radius fractures. AO/ASIF Upper Extremity Internal Fixation Course, Cleveland, Ohio, December 5, 2009.

Tendon repair and rehabilitation. Doctors Demystify Tendons. Cleveland Clinic, April 17, 2010.

Muscle and tendon anatomy. Doctors Demystify Tendons. Cleveland Clinic, April 17, 2010.

Surgery for Thumb CMC Arthritis - Does Anything Hold Up to the Gold Standard? Orthopaedic Surgery Congress - 90 Years of Orthopaedics at the Cleveland Clinic: Honoring our past and vision for the future. Cleveland, Ohio, September 25, 2010.

Imaging Workflow at Basic and Intermediate Digital Imaging. American Society for Surgery of the Hand Annual Meeting, Boston, MA, October 9, 2010.

Hand Pain and Paresthesia. Pain management for Primary Care Physicians. Cleveland Clinic, Cleveland, Ohio, October 23, 2010.

Online Physician Identity: How you got it, how you get it, and what you can do about it. 2011 New Technology in Upper Extremity Surgery: The Cutting Edge. Lutheran Hospital – Cleveland Clinic, Cleveland, Ohio, June 6, 2011.

Distal Radius Fracture Complications: Approach and Avoidance. Orthopaedic Grand Rounds, Cleveland Clinic, October 12, 2011

Patient Specific Computer Generated Template for 3D Reconstruction of Distal Radial Malunions. New Technology in Upper Extremity Surgery: The Cutting Edge. Lutheran Hospital - Cleveland Clinic, Cleveland, Ohio, June 12, 2012.

CLEVELAND CLINIC EDUCATIONAL PRESENTATIONS

Wrist instability. CCF resident hand surgery conference, March 21, 2003.

Moderator: CCF Health talks: Treatment options for hand, wrist, and elbow problems throughout life. Cleveland Clinic Foundation, Westlake Family Health Center, March 26, 2003.

Distal Radius Fractures. CCF resident hand surgery conference, October 15, 2003.

Physical examination of the upper extremity. CCLCM, November 1, 2005.

Anatomy of the upper extremity. CCLCM, January 17, 2006.

Hand and wrist arthritis. (Moderator and presenter) CCF sponsored Health Talk. Lorain County Community College. September 19, 2006.

Wrist ligament injuries and treatment. CCF orthopaedic resident surgery conference. October 24, 2006.

Compartment syndromes of the upper extremity. CCF orthopaedic resident surgery conference. March 20, 2007.

Arthritis in the Hand and Wrist: Surgical options and non-surgical tips for better living. (Moderator and Presenter) Cleveland Clinic Health Talk. Lorain Community College, Elyria, Ohio, September 11, 2007.

Arthritis in the Hand and Wrist: Surgical options and non-surgical tips for better living. Cleveland Clinic Health Talk. Avon Lake, Ohio, February 20, 2008.

Common Hand Problems in Primary Care. Lorain Institute "Lunch and Learn", July 23, 2012.