

J. Douglas Patterson, M.D.
Diplomate of the American Board of Orthopaedic Surgery
Curriculum vitae

Certification **Board Certified, American Board Orthopaedic Surgery (7/11/03)**
Certificate of Added Qualifications in Hand Surgery (CAQSH) (8/7/04)
Board Recertification (Combined Hand) (12/31/33)

Appointments:

Chief, Christiana Hand & Upper Extremity Section, Department of Orthopaedics
Member, Christiana Orthopaedic Executive Committee and Peer Excellence Committee
President & Executive Committee member, Delaware Orthopaedic Specialists
President & Managing Partner, Orthopaedic Specialists Surgi-Center
Clinical Associate Professor, Department of Biomedical Engineering, Widener University
Managing Partner, Orthopaedic Specialists P.A.

Fellowship

8/00-8/01

Harvard Hand & Upper Extremity Fellowship, Boston MA
Staff Appointments: Brigham and Women's Hospital, Massachusetts General Hospital,
Faulkner Hospital, Boston/Jamaica Plain VA Hospitals
Clinical Fellow: Boston Children's Hospital

Residency

7/97-7/00

Duke Orthopaedic Residency Program, Durham NC

Awards

Duke Orthopaedic Surgery, Award for Excellence in Orthopaedic Research (00)

7/96-7/97

Harvard Combined Orthopaedic Residency Program, Boston MA

Internship

7/95-7/96

New England Deaconess Hospital, Boston MA

Education

9/90-6/95

Harvard University School of Medicine, Boston, MA
Doctor of Medicine: *Cum laudae* in the Special Field of Orthopaedic Science

Research

Carl B. Walter Research Fellow (93-94)
Orthopaedic Biomechanics Laboratory, Beth Israel Hospital
Research Assistant (93-94)
Circadian Rhythm and Sleep Disorders Laboratory, Brigham and Women's Hospital
Harvard Medical School Research Fellow (92)
Orthopaedic Biomechanics Laboratory, Beth Israel Hospital

Awards

Finalist for New Researcher of the Year, Orthopaedic Research Society (95)
Best Overall Presentation - Eastern Student Research Forum (94)
Best Scientific Paper Travel Grant to European Student Conference at Charite

Hospital, Berlin – Eastern Student Research Forum (94)
Roche Laboratories Award for Excellence in Basic Science Research –
National Student Research Forum (94)
Roche Laboratories Travel Grant for Excellence in Research – National
Student Research Forum (94)
University of Texas Medical Branch Department of Surgery Award for the
Best Paper and Presentation in the Field of Surgery (94)

Activities Surgical Seminar, Co-director, Harvard Medical School (93-94)
Harvard Medical School-Boston High Schools Sex Ed. Program (91-92)
Vanderbilt Hall Athletic Facility, Staff, Harvard Medical School (91-92)

9/86-5/90 Duke University, Trinity College of Arts and Science, Durham, NC
Bachelor of Science (Biology): *Magna cum laudae*, GPA 3.75, Rank 55/1201

Research Duke University Research Fellow (86-90)
Infectious Diseases, Duke University Medical Center, Hospital South

Awards Captain, Duke University Men's Varsity Swim Team (90)
Duke University Athletic Association Senior Letter Award (90)
Dean's List with Distinction (87-90)
Atlantic Coast Conference Honor Roll (87-90)
Phi Beta Kappa National Honor Society (89)
Phi Eta Sigma National Freshman Honor Society (87)

Activities Duke University Men's Varsity Swim Team (86-90)
Duke Athletes Against Drugs (90)
Surfguard, NPS, Sandy Hook National Recreation Area (86-91)
Lifeguard Tournament Team, Sandy Hook National Recreation Area (88-91)
U.S. Lifeguard Association Regional Competitor (90,91)
U.S. Lifeguard Association National Competitor (90)
Emergency Ward volunteer, Riverview Medical Center, Red Bank, NJ (88,89)

Publications

J.D. Patterson, M. Shea, P. Miller, B. Mitlak, R. Neer, and W.C. Hayes: **Parathyroid Hormone (PTH 1-84) Increases Bone Morphologic and Biomechanical Properties in Estrogen-deficient Rats.** *Transactions of the ORS*, 20-2: 280, 1995.

C.A. Leal, M. Shea, J.D. Patterson, and W.C. Hayes: **Alendronate Therapy Prevents Strength Loss from Osseous Metastatic Defects in a Rat Model.** *Transactions of the ORS*, 20-2: 210, 1995.

P. Kloen, J.D. Patterson, B.I. Wintman, R.M. Ozuma, and G.W. Brick: **Closed Cervical Spine Trauma Associated with Bilateral Vertebral Artery Injuries.** *Archives of Orthopaedic & Trauma Surgery*, 119:478-481, 1999.

J.D. Patterson, C.K. Jones, R.R. Glisson, A.E. Caputo, T.J. Goetz, and R.D. Goldner: **Structural Analysis of Simulated Radial Neck Fracture Fixed with Four Different Devices.** *Journal of Shoulder and Elbow Surgery*, 10-1: 57-61, 2001.

J.D. Patterson and J.R. Urbaniak: **Congenital Hypoplasia of the Ulnar Nerve.** *Journal of Bone and Joint Surgery*, 84-A (5):808-812, 2002.

J.D. Patterson and B.P. Simmons: **Outcomes assessment in carpal tunnel syndrome.** *Hand Clinics*, 18-2:359-363, 2002.

D.Ring, J.D. Patterson, S. Levitz, C. Wang, and J.B. Jupiter: **Both Scanning Plane and Observer Affect Measurements of Scaphoid Deformity** . *J Hand Surg Am*, 30 (4):696-701, 2005.

T Iorio, J.C. Wong, J.D. Patterson and M Rekan: **Olecranon Osteotomy Fixation Using a Novel Device: the Olecranon Sled.***Tech Hand Up Extrem Surg*, 17-3:151-157, 2013.

D Bakker, JTP Kortlever, D Ring, D Patterson, D Napoli, NG Harness, LM Reichel; **Volar Tilt of the Lunate After Open Reduction Internal Fixation of a Distal Radius Fracture** *J Hand Surg Am*, 12:S0363-5023, 2020.

Presentations

J.D. Patterson, M. Shea, P. Miller, B. Mitlak, R. Neer, and W.C. Hayes: **Parathyroid Hormone (1-84) Increases Bone Morphologic and Biomechanical Properties in Estrogen-deficient Rats.** [Podium presentations: Eastern (1994, Miami, FL) and National (1994, Galveston, TX) Student Research Forums, and European Student Conference (1994, Berlin, Ger.); Poster presentations: Soma Weiss Research Forum (1995, Boston, MA) and Orthopaedic Research Society (1995, Orlando, FL).

C.A. Leal, M. Shea, J.D. Patterson, and W.C. Hayes: **Alendronate Therapy Prevents Strength Loss from Osseous Metastatic Defects in a Rat Model.** [Podium presentation: Orthopaedic Research Society (1995, Orlando, FL).

S. Levitz, D. Ring, and J.D. Patterson: **Quantitative Three-Dimensional CT Analysis of the Scaphoid.** [Podium and Poster presentations: American Society for Surgery of the Hand (2001, Baltimore, MD).

Inventor/Business Owner

Avanti Orthopaedics LLC - Founding Member and CEO

FDA 510k:

K191118 Avanti Orthopaedics Distal Radius and Forearm System

K211592 Avanti Orthopaedics Ulnar Shortening System

K222967 Avanti Orthopaedics Cannulated Compression Screw System (submitted)

Patents:

US 9,814,503 B1 Load Sharing Bone Plate

US 10,285,742 B1 Bone Manipulator System and Method

US 10,517,657 B1 Load Sharing Bone Plate

US 10,842,543 B2 Load Sharing Bone Plate

US 11,083,505 B1 Bone Manipulator System and Method

US 11,311,322 B1 Load Sharing Bone Plate

US 11,452,552 B1 Load Sharing Bone Plate

US 11,452,553 B1 Augmented Spanning Fixation Bone Plate Assembly

US 11,457,931 B1 Bone Shortening Osteotomy Apparatus

US 11,925,395 B1 Augmented Spanning Fixation Bone Plate Assembly

US 11,937,858 B2 Load Sharing Bone Plate

Orthopaedic Specialists Surgi-Center, LLC (partnership with SCA/Virtua)

Regional Orthopaedic Associates (Delaware Orthopaedic Specialists) P.A.

Orthopaedic Properties, LLC

Regional Orthopaedic Property Investments, LLC

Regional Medical Management Services, LLC

Hobbies/Interests

Automobile Enthusiast –Member New Jersey Motorsport Park Drivers' Club (approved Driver's Club Instructor), Graduate of Bertil Roos Racing School, Participant and award-winner in multiple Concours Events, frequent attendee of international motorsport events (F1 races in Italy, Belgium, Spain, Canada, USA and Monaco; WRC race in Corsica)

Target Shooting – Life & Endowment Member of NRA, Member of Cumberland Riflemen, Member of Atglen Sportmen's Club, Member of Long Lake Fish & Game Club

Outdoorsman – backpacking, hiking, canoeing, kayaking, sailing, cross-country skiing, snowshoeing, ice fishing, overlanding, PADI Advanced Open Water SCUBA diver