#### **Curriculum Vitae**

Daniel C. Fitzpatrick, MD, MS

3355 Antigua Drive Eugene, OR 97408 (541) 343-5957 danfitz@mac.com July 22, 2008

## I. Personal

Birth: April 18, 1969 (Cedar Rapids, Iowa)

Spouse: Denise K. Fitzpatrick

Children: Connor Michael, born 6-17-00 Aidan James, born 6-21-02 Reese Elizabeth, Born 4-20-04

# II. Educational and Professional History

## A. Institutions attended

	Institution	Year	Degree	
High School	LaSalle High School	1987	HS Diploma	
Undergraduate	Loras College University of Iowa	1987-1988 1988-1991	B.S. (Engineering)	
Graduate	University of Iowa	1991-1993	M.S. (Engineering)	
	Thesis: "The effects of an articulated external fixator on ankle joint kinematics"			
Medical School	University of Iowa College of Medicine	1993-1997	M.D.	
Residency	University of Iowa Department of Orthopaedic Surgery	1997-2002		

- B. Practice: Slocum Center for Orthopedics, 55 Coburg Road, Eugene, OR 97401 2002-present
- C. Academic Appointment: Courtesy Associate Professor in the Department of Human Physiology, University of Oregon, Eugene, OR.
- D. Research Affiliation: Surgeon Collaborator, Legacy Biomechanics Laboratory, Legacy
  Research & Technology Center, Portland, OR.
  2002-present

#### E. Examinations

USMLE: Part 1: 207

Part 2: 234 Part 3: 232

ABOS Part 1 Board Examination: Passed July, 2002 ABOS Part 2 Board Examination: Passed July, 2004

F. State License: Oregon, Issued 2002

# G. Honors, Awards, Recognitions, Achievements

Award/Honor	Date
Varsity Letter, Track and Soccer, Loras College	1987-1988
Loras College Senior Engineering Scholarship	1988
Loras College Academic Scholarship	1987-1988
University of Iowa Tuition Scholarship	1988-1991
Graduation with Honors, University of Iowa Biomedical Engineering	1991
American Society of Biomechanics Clinical Biomechanics Award	1994
College of Medicine Curran Bequest Scholarship	1994
Iowa Orthopaedic Society Medical Student Award for Musculoskeletal Research	1997
Zimmer/AOA Resident Research Award	2003

## III. Professional and Service Activities

- A. Co-editor, 2001 Iowa Orthopaedic Journal
- B. Coordinator, Iowa City Free Medical Clinic Orthopaedic Clinics (1999-2001)
- C. Medical Director, McKenzie-Willamette Medical Center Physical Therapy (2003-2006)
- D. Local Organizing Committee Member, American Society of Biomechanics Annual Meeting, Portland OR, 2004
- E. Fellow of the American Association of Orthopaedic Surgeons

- F. Member, Orthopaedic Research Society
- G. Member, Orthopaedic Trauma Association
- H. Board Member, Oregon Association of Orthopedics (2005 current)

#### IV. Research

#### I. Research Grants (Active)

NIH 1R21AR053958-01 "Evaluating and Improving an Emergent Technology for Fixation of Bone Fractures" Co-principle investigator.

"A randomized, prospective study comparing intertrochanteric hip fracture fixation with the DHS and the DHHS in a community practice" 2006 –funded by Synthes.

## J. Published Manuscripts

Doornink J, <u>Fitzpatrick DC</u>, Boldhaus S, Madey SM, Bottlang M. 2010. Effects of hybrid plating with locked and nonlocked screws on the strength of locked plating constructs in the osteoporotic diaphysis. J Trauma 69(2):411-7.

Bottlang M, Lesser M, Koerber J, Doornink J, von Rechenberg B, Augat P, <u>Fitzpatrick DC</u>, Madey SM, Marsh JL. 2010. Far cortical locking can improve healing of fractures stabilized with locking plates. J Bone and Joint Surg 92(7):1652-60.

Lujan TJ, Henderson CE, Madey SM, <u>Fitzpatrick DC</u>, Marsh JL, Bottlang M. 2010. Locked palting of distal femur fractures leads to inconsistent and asymmetric callus formation. J Orthop Trauma 24(3): 156-62.

Bottlang M, Helzel I, Long W, <u>Fitzpatrick DC</u>, Madey S. 2010. Less-invasive stabilization of rib fractures by intramedullary fixation: a biomechanical evaluation. J Trauma 68(5): 1218-24.

Lujan TJ, Madey SM, <u>Fitzpatrick DC</u>, Byrd GD, Sanderson JM, Bottlang M. 2010. A computational technique to measure fracture callus in radiographs. J Biomech 43(4): 792-5.

Helzel I, Long W, <u>Fitzpatrick DC</u>, Madey S, Bottlang M. 2009. Evaluation of intramedullary rib splints for less-invasive stabilisation of rib fractures. Injury 40(10):1104-10

Bottlang, M, Doornink, J, <u>Fitzpatrick, DC</u>, Madey, SM. Far cortical locking can reduce stiffness of locked plating constructs while retaining construct strength. Accepted for publication, J Bone and Joint Surg 91:1985-1994, 2009.

<u>Fitzpatrick, DC</u>, Doornink, J, Madey, SM, Bottlang, M. Relative stability of locked plating fixation in a model of the osteoporotic femoral diaphysis. Clinical biomechanics (Bristol, Avon) 24:203-209, 2009.

Doornink, J, <u>Fitzpatrick</u>, <u>DC</u>, Boldhaus, S, Madey, SM, Bottlang, M. Hybrid fixation with locked and non-locked screws in osteoporotic diaphyseal bone. Accepted, Clinical Biomechanics, June 2009.

Bottlang, M., Doornink, J., Byrd, G., <u>Fitzpatrick, DC</u>, Madey, SM, A non-locking endscrew can decrease fracture risk caused by locked plating in the osteoporotic diaphysis. The Journal of Bone and Joint Surgery 2009;91:620-627.

Henderson, C., Bottlang, M., Marsh, J.L., <u>Fitzpatrick, D.C.</u>, Madey, S.M. Does locked plating of periprosthetic supracondylar femur fractures promote bone healing by callus formation? Two cases with opposite outcomes. The Iowa Orthopaedic Journal, 2008, Vol 28, 73-76.

Sommers, M, <u>Fitzpatrick</u>, <u>DC</u>, Madey, SM, Bottlang, M. A Surrogate Long-Bone Model with Osteoporotic Material Properties for Biomechanical Testing of Fracture Implants, in revision, Journal of Biomechanics, 2007.

Ehmke, L, <u>Fitzpatrick DC</u>, Krieg, JC, Madey, SM, Bottlang, M. Lag Screws for Hip Fracture Fixation: Evaluation of Migration Resistance Under Simulated Walking. Journal of Orthopaedic Research, 23(6): 1329-35, 2005.

<u>Fitzpatrick, DC</u>, Sommers, MB, Kahn, KM, Marsh JL, Bottlang, M. Anterior/posterior stability of the knee following articulated external fixation. American Journal of Sports Medicine, 33: 1735-41, 2005.

Sommers, MB, <u>Fitzpatrick</u>, <u>DC</u>, Kahn, KM, Marsh JL, Bottlang, M. Hinged external fixation of the knee: Effects on joint motion. Journal of Orthopaedic Trauma, 18(3):163-9, 2004.

<u>Fitzpatrick, DC</u>, Otto JK, McKinley TO, Marsh JL, Brown, TD. Kinematic and contact stress analysis of posterior malleolus fractures of the ankle. Journal of Orthopaedic Trauma, 18(5):271-8, 2004.

Zhang, Y, Ahn, PB, <u>Fitzpatrick, DC</u>, Heiner, AD, Poggie, RD, Brown, TD. Interfacial frictional behavior: cancellous bone, cortical bone, and a novel porous tantalum biomaterial. Journal of Musculoskeletal Research, 3(4): 245-251, 1999.

<u>Fitzpatrick DC</u>, Jebson PJL, Madey SM, Steyers CM. Upper extremity musculoskeletal manifestations of dialysis associated amyloidosis. Iowa Orthopedic Journal, 16:135-138, 1996.

Bristol RE, <u>Fitzpatrick DC</u>, Brown TD, Callaghan JJ. Non-uniformity of contact stress on polyethylene inserts in total knee arthroplasty. Clinical Biomechanics, 11(2):75-80, 1996.

<u>Fitzpatrick DC</u>, Marsh JL, Brown TD. The effect of an articulated external fixator on ankle and subtalar joint kinematics. Journal of Orthopaedic Trauma, 9(1):76-82, 1995.

<u>Fitzpatrick DC</u>, Foels WS, Pedersen DR, Marsh JL, Saltzman CL, Brown TD. An articulated ankle external fixation system that can be aligned with the ankle axis. Iowa Orthopaedic Journal, 15:197-203, 1995.

#### K. Presentations

Boldhaus S, Doornink J, Sommers M, <u>Fitzpatrick DC</u>, Madey S, and Bottlang M. A surrogate long bone model with osteroporotic material properties for biomechanical testing of fracture. 3rd Annual Northwest Biomechanics Symposium, Eugene, OR, 2007.

Sommers, M, <u>Fitzpatrick DC</u>, Madey SM, Bottlang M. Fixation Strength Using a Combination of Locking and Non-locking Screws in an Osteoporotic Surrogate Bone Model. Orthopaedic Trauma Association Basic Sciences Day, Scottsdale, Arizona, 2006.

<u>Fitzpatrick DC</u>, Twenty Questions About Locked Plating North Pacific Orthopaedic Association Annual Meeting, Skamania Lodge, Washington, September, 2006.

<u>Fitzpatrick DC</u>, Bruehl M, Ehmke L, Mayo K, Bottlang M. Relative strength of conventional and locking plate fixation in osteoporotic bone. Orthopaedic Trauma Association Annual Meeting, Ottawa, Canada, 2005.

<u>Fitzpatrick DC</u>, Locked Plating of Proximal Humerus Fractures. Oregon Association of Orthopaedics Annual Meeting, Salishan, OR, 2004.

<u>Fitzpatrick DC</u>, Bottlang, M, Bruehl, M. Newer treatment of complex fractures with locking plates. North Pacific Orthopaedic Association Annual Meeting, Eugene, Oregon, August 2004.

Marsh JL, <u>Fitzpatrick DC</u>, Bottlang M, Sommers MB, Kahn KM. Kinematics of Single Hinge Knee External Fixation. Mid-America Orthopaedic Association Annual Meeting, Tuscan, Arizona, 2002.

<u>Fitzpatrick, DC</u>, Otto JK, McKinley TO, Marsh JL, Brown, TD. Dynamic Contact Stress Patterns Following Simulated Posterior Malleolar Ankle Fractures Mid-America Orthopaedic Association Annual Meeting, Tuscan, Arizona, 2002.

<u>Fitzpatrick, DC</u>, Otto JK, McKinley TO, Marsh JL, Brown, TD. Kinematic and contact stress analysis of posterior malleolus fractures of the ankle. American Academy of Orthopaedic Surgeons Annual Meeting, Dallas, Texas, 2002

<u>Fitzpatrick DC</u>, Otto JK, McKinley TO, Marsh JL, Brown TD. Dynamic contact stress and kinematic changes following a malreduced posterior malleolar fracture. AOA Residents Conference, Hershey, Pennsylvania, March, 2001.

<u>Fitzpatrick DC</u>, Jebson PJL, Madey SM, Styers CM. Upper extremity musculoskeletal manifestations of dialysis associated amyloidosis. Annual Meeting of the Mid-America Orthopedic Association, Hilton Head, South Carolina, April, 1997.

Bristol RE, <u>Fitzpatrick DC</u>, Callaghan JJ. Contact stresses on machined vs. molded UHMWPe inserts in total knee arthroplasty. The Orthopaedic Research Society Annual Meeting, 1994.

<u>Fitzpatrick DC</u>, Marsh JL Brown TD. The effects of an external fixator on ankle joint mechanics. American Society of Biomechanics Annual Meeting, 1993.

Marsh JL, <u>Fitzpatrick DC</u>, Brown TD. The effect of unilateral articulated external fixation on ankle joint kinematics. Orthopaedic Trauma Association Annual Meeting, 1993.

Bristol RE, <u>Fitzpatrick DC</u>, Callaghan JJ. Contact stresses on machined vs. molded UHMWPe inserts in total knee arthroplasty. American Society of Biomechanics Annual Meeting, 1993.

#### L. Poster Exhibits

Sommers, M, Kroehn, S, <u>Fitzpatrick, DC</u>, Madey, SM; Bottlang, M, Far Cortical Locking Delivers Less-Rigid Biologic Plate Fixation of Fractures. The Orthopaedic Research Society Annual Meeting, Chicago, IL, 2006

<u>Fitzpatrick DC</u>, Dennis K. Collis, Craig G. Mohler, Brian Jewett. Cemented Rough Iowa Stems: Results in Patients Over 60 Years Old. The Western Orthopaedic Association Annual Meeting, San Francisco, CA, 2004.

<u>Fitzpatrick DC</u>, Desinger, D, Sommers, MB, Bottlang M. Anterior stability following articulated spanning external fixation of the knee. The Orthopaedic Research Society Annual Meeting, San Francisco, CA, March 2004.

<u>Fitzpatrick, DC</u>, Otto JK, McKinley TO, Marsh JL, Brown, TD. Dynamic Contact Stress Aberrations after Simulated Posterior Malleolar Fractures of the Ankle. Orthopaedic Trauma Association Annual Meeting, San Diego, California, 2001.

<u>Fitzpatrick DC</u>, Jebson PJL, Madey SM, Styers CM. Upper extremity musculoskeletal manifestations of dialysis associated amyloidosis. American Society for Surgery of the Hand Annual Meeting, Nashville, Tennessee, September 1996.

<u>Fitzpatrick DC</u>, Marsh JL, Brown TD. Articulated external fixation of tibial pilon fractures: effects on ankle and fragment kinematics. The Orthopaedic Research Society Annual Meeting, 1994.

<u>Fitzpatrick DC</u>, Marsh JL, Brown TD. Articulated external fixation of tibial pilon fractures: effects on ankle and fragment kinematics. University of Iowa Research Day, 1994.

#### M. Scientific Exhibits

Marsh JL, Bonar S, <u>Fitzpatrick DC</u>, Brown TD. Articulated external fixation of tibial pilon fractures. The American Academy of Orthopaedic Surgeons Annual Meeting, 1994.

# N. Award Papers

American Society of Biomechanics 1994 Clinical Biomechanics Award Paper Bristol RE, <u>Fitzpatrick DC</u>, Brown TD, Callaghan JJ. Non-uniformity of contact stress on polyethylene inserts in total knee arthroplasty.