### Nathan K. Endres, M.D. CURRICULUM VITAE

Position: Assistant Professor Department of Orthopaedics and Rehabilitation, University of Vermont, Burlington, VT

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# **EDUCATION:**

1993-97	Brown University, Providence, RI	B.A.	Political Science
1997-2001	University of Rochester Medical School	M.D.	
2001-02	University of Vermont, Burlington, VT	Intern	General Surgery
2002-06	University of Vermont, Burlington, VT	Resident	Orthopaedic Surgery
2006-07	Harvard Shoulder Service, Boston, MA	Fellow	Shoulder Surgery
2007-08	Maine Medical Center, Portland,	AO Trauma Fellow	Orthopaedic Trauma
2008-08	Brigham and Women's, Boston, MA	Fellow	Sports Medicine
2017	AANA Traveling Fellowship		

# LICENSES, CERTIFICATION:

2008-present	Medical licensure, Vermont
2006-09	Medical licensure, Massachusetts
2007-08	Medical licensure, Maine
2010	Board Certification Orthopaedic Surgery
2011	Certificate of Added Qualification Sports Medicine

# FACULTY POSITIONS HELD:

Years	Institution		Department
2017-present	University of Vermont	Associate Professor	Orthopaedic Surgery
2008-2017	University of Vermont	Assistant Professor	Orthopaedic Surgery
2006-08	Harvard University	Instructor	Orthopaedic Surgery
2002-06	University of Vermont	Clinical Instructor	Orthopaedic Surgery

# OTHER POSITIONS AND MAJOR ADMINISTRATIVE POSITIONS HELD:

Years	Location/program name	Role
1995	Strong Children's Research Center, Rochester, NY	<b>Research Assistant</b>

1997	Rhode Island State House	Intern
1998	Department of Orthopaedic Surgery, UCSF	Research Assistant

### HONORS AND AWARDS:

Year	Name of award
1999	Letter of Commendation for Academic Achievement, University of Rochester Medical
	School
2001	Doran Stephens Prize, University of Rochester Medical School
2002	Intern of the Year, University of Vermont Department of General Surgery
2006	Raymond F. Kuhlmann Resident Research Award, University of Vermont Department of
	Orthopaedics and Rehabilitation
2013	Outstanding Teacher of the Year, University of Vermont Department of Orthopaedics and
	Rehabilitation

### **PROFESSIONAL SERVICE**

### DEPARTMENT/COLLEGE/MEDICAL CENTER

# **DEPARTMENTAL SERVICE**:

2009-present	Department of Orthopaedics and Rehabilitation	Education Committee	Chair
2011	Department of Orthopaedics and Rehabilitation	Faculty Search Committee	Member
2013-present	Department of Orthopaedics and Rehabilitation	Milestones Committee	Chair
2013-present	Department of Orthopaedics and Rehabilitation	CCC Committee	Chair
2014	Department of Orthopaedics and Rehabilitation	Call Committee	Member
2016	Department of Orthopaedics and Rehabilitation	Faculty Search Committee	Member

#### COLLEGE OF MEDICINE SERVICE:

2012-present

2012-present 2013-present

2016	Medical School Interview Committee	Member	
MEDICAL C	ENTER SERVICE:		
2013 2014-present	UVMMC Representative to Northeast Purchasing Coalition (NPC) Value Analysis Committee	Member	
GOVERNME	ENT:		
2008-present	FDA Orthopaedic and Rehabilitation Devices Advisory Panel	Member	
SOCIETY M	EMBERSHIPS		
Years 2006-present	<b>Society</b> American Orthopaedic Association (AOA) Emerging Leaders Program		
2010-present			

American Academy of Orthopaedic Surgeons (AAOS)

American Orthopaedic Society for Sports Medicine (AOSSM)

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International Cartilage Repair Society (ICRS)

2013-presentU.S. Ski and Snowboard Team Physician Pool2015-presentInternational Society of Arthroscopy, Knee Surgery and Orthopaedic Sports<br/>Medicine (ISAKOS)<br/>Codman Shoulder Society<br/>New England Shoulder and Elbow Society<br/>AO Trauma<br/>AO North America Musculoskeletal Trauma Faculty<br/>New England Orthopaedic Society<br/>Vermont Orthopaedic Society

# SERVICE TO PROFESSIONAL ORGANIZATIONS:

2014-present	AOSSM Self-Assessment Committee	Member
2014-present A	AOSSM Council of Delegates	Member

### SERVICE TO PROFESSIONAL PUBLICATIONS:

2015-present Knee Surgery, Sports Traumatology and Arthroscopy (KSSTA) Journal Reviewer

> Journal of the American Medical Association (JAMA) Prior Journal Reviewer

### PUBLIC SERVICE:

2008-present	Orthopaedic Consultant, University of Vermont Athletics
2008-present	Orthopaedic Consultant, St. Michael's College Athletics
2012	Event Coverage, IIHF Women's World Ice Hockey Championships, Burlington,
	VT
2013	Team Coverage, US Free Skiing Team, World Cup Finals, Sierra Nevada Spain
2015	Team coverage, US Alpine Ski Team, Nor-Am Finals and US National Downhill
	Championships Sugarloaf, ME
2014-2015	Shelburne (VT) Recreation Department Youth Soccer Coach (1-2 grade)
2014-present	Medical Advisory Board, Vermont Sports Magazine
2015-present	Burlington Bike Path Renovation Advisory Committee
2016	Medical Advisor, Bolton Valley Ski Patrol
2017	Team Physician, Vermont Bucks
	Brown University Alumni Interviewer

# TEACHING

# FORMAL SCHEDULED CLASSES:

Year	Course Title	Cou R	rse E	Hours	Number of Learners	Learner Level
2009	PT 242 Patient Management Musculoskeletal 1	Х		1	35-40	UG
2009	Connections Course	Х		1	~100	G-Med
2009	Vermont Integrated Curriculum	Х		2	10-15	G-Med
2010	PT 242 Patient Management Musculoskeletal 1	Х		1	35-40	UG
2010	Connections Course	Х		1	~100	G-Med
2010	Vermont Integrated Curriculum	Х		2	10-15	G-Med
2011	PT 242 Patient Management Musculoskeletal 1	х		1	35-40	UG
2012	PT 242 Patient Management Musculoskeletal 1	Х		1	35-40	UG
2012	Connections Course	Х		1	~100	G-Med
2012	Vermont Integrated Curriculum	Х		2	10-15	G-Med
2013	PT 242 Patient Management Musculoskeletal 1	Х		1	35-40	UG
2013	Connections Course	Х		1	~100	G-Med
2013	Vermont Integrated Curriculum	Х		2	10-15	G-Med
2014	PT 242 Patient Management Musculoskeletal 1	Х		1	35-40	UG
2014	Connections Course	Х		1	~100	G-Med
2014	Vermont Integrated Curriculum	Х		2	10-15	G-Med
2014	AT 171 Clin Experience in AT III	Х		16	3	UG
2015	PT 242 Patient Management Musculoskeletal 1	Х		1	35-40	UG
2015	Connections Course	Х		1	~100	G-Med
2015	Vermont Integrated Curriculum	Х		2	10-15	G-Med
2015	AT 171 Clin Experience in AT III	Х		16	3	UG
2016	PT 242 Patient Management Musculoskeletal 1	Х		1	35-40	UG
2016	Connections Course	Х		1	~100	G-Med
2016	Vermont Integrated Curriculum	Х		2	10-15	G-Med
2016	AT 171 Clin Experience in AT III	х		16	3	UG
2017	PT 242 Patient Management Musculoskeletal 1	х		1	35-40	UG

### POSTGRADUATE AND OTHER COURSES:

- 1. 2010-2016. Orthopaedic Surgery Core Lecture. MS III- University of Vermont College of Medicine. 1 hour. Approx 7 times/year. 10-12 students.
- 2. 2008-current. Orthopaedic Surgery Resident Lecture. University of Vermont Orthopaedic Surgery Residency Program. 45 minutes. 5-8 lectures/year. 15 residents and any medical students on service.
- 3. 2012-current. Orthopaedic Surgery Skills Session. Surgery Resident Readiness Course. MS IV-University of Vermont College of Medicine. 2 hours. Yearly. 10-15 students.

### TEACHING AWARDS AND NOMINATIONS:

2013 Outstanding Teacher of the Year, University of Vermont Department of Orthopaedics and Rehabilitation

# **RESEARCH AND SCHOLARLY ACTIVITIES:**

### PEER REVIEWED PUBLICATIONS:

- 1. Schaffer SJ, Kincaid MS, **Endres NK**, Weitzman M. Lead Poisoning Risk Determination in a Rural Setting. Pediatrics. 1996; 97(1):84-90.
- 2. Fang A, Hu SS, **Endres NK**, Bradford DS. Risk Factors for Infection After Spinal Surgery. Spine. 2005; 30(12):1460-65. PMID: 15959380
- 3. Endres NK, Warner JJP. Anterior Instability After Total Shoulder Replacement: Salvage with Modified Latarjet Procedure A Report of Two Cases. J Shoulder Elbow Surg. 2010; 19 (2):e1-e5. PMID: 19734059
- 4. Petit CJ, Millett PJ, **Endres NK**, Diller D, Harris MB, Warner JJP. Management of proximal humeral fractures: surgeons don't agree. J Shoulder Elbow Surg. 2010; 19 (3):446-51. PMID: 19800259
- Kim S, Endres NK, Johnson RJ, Ettlinger CF, Shealy JE. Snowboarding Injuries: Trends Over Time and Comparison with Alpine Skiing Injuries. Am J Sports Med. 2012; 40(4):770-776. PMID: 22268231
- 6. Carter JL, **Endres NK**, Halsey DA. Bilateral Acute Calcium Pyrophosphate Crystal Arthritis after Total Knee Arthroplasty: Case Report. JBJS Case Connector. 2012; 2(4):e59 1-4.

### **NON-PEER REVIEWED PUBLICATIONS:**

### **Review Articles**

7. El-Hassan B, Endres NK, Higgins LD, Warner JJP. Massive irreparable tendon tears of the rotator cuff: salvage options. Instr Course Lect. 2008; 57:153-66. PMID: 18399577

### **Other Scholarly Publications**

- 8. Endres NK, Minas T. A Modified Surgical Technique for Anteromedialization. Techniques in Knee Surgery. 2010; 9 (1):59-63.
- 9. Endres NK, Minas T. Medial Subvastus Approach: Surgical Technique. Harvard Orthopaedic Journal. 2010; 10: 62-65.

 Almzayyen MI, Lesiak AC, Morwood MP, Endres NK. "Open Reduction and Internal Fixation of Acromion Fractures Using a Pre-Contoured Distal Clavicle Plate: A Technical Trick." Techniques in Shoulder and Elbow Surgery. 2013; 14(4): 88-91.

### Abstracts

 Trafton PG, Endres NK. Bilateral Tibia Fractures Revisited. Orthopaedic Transactions. 1998-99; 22(4): 1166.

# **Books and Chapters**

- 1. Aronsson DD, Endres NK, Putnam RM. "Post-Operative Management." In <u>Pediatric Orthopaedic</u> <u>Secrets</u>, 3<sup>rd</sup> Edition. Elsevier, 2007.
- 2. Endres NK, Elhassan B, Higgins LD, Warner JJP. "The Stiff Shoulder". In <u>The Shoulder, 4<sup>th</sup></u> <u>Edition</u>. Elsevier, 2009.
- 3. Bartlett CSB III, Putnam RM, **Endres NK**, Weiner LS. "Fractures of the Tibial Pilon." In <u>Skeletal</u> <u>Trauma, 4<sup>th</sup> Edition</u>. Elsevier, 2009.

### Videos

1. Warner JJP, **Endres NK**, Diller D. "Surgical Management Options in Young Patients: The Arthrosurface Technique." Presented at the American Shoulder and Elbow Surgeons (ASES) Specialty Day at AAOS, San Diego, CA, 2007

### Posters

- 1. Lemos DF, Riascos R, Meyer RE, Endres NK, Higgins TJ. "Imaging of Acetabular Labral Lesions with Emphasis on the Collagen Architectural Framework of the Labrum with Arthroscopic Hip Correlation." Education Exhibit, RSNA Annual Meeting, Chicago, Il 2011
- 2. Petit CJ, Millett PJ, Endres NK, Diller D, Harris MB, Warner JJP. "Management of Proximal Humerus Fractures: Surgeons Don't Agree." E-poster, AAOS Annual Meeting, Las Vegas, NV 2009

### **Blogs and Magazine Articles**

- 1. Endres NK. "Articular Cartilage Injuries." Fletcher Allen Health Care Blog. August 18, 2010.
- 2. Endres NK. "Winter Olympics: What Is an Anterior Cruciate Ligament (ACL) Injury?" Fletcher Allen Health Care Blog. February 27, 2014.

- 3. **Endres NK**. "Meniscus Tears: Understanding a Common Knee Problem." Fletcher Allen Health Care Blog. May 20, 2014.
- 4. Endres NK. "Staying in the Game: Injuries in Youth Soccer and How to Prevent Them." Fletcher Allen Health Care Blog. May 27, 2014
- 5. Endres NK. "Rock Climbing Injuries." Vermont Sports Magazine. August 2014
- 6. Endres NK. "Orthopedics 101- A Crash Course in Orthopedic Anatomy." Vermont Sports Magazine. January 2015
- 7. Endres NK. "Orthopedics 101- A Crash Course in Orthopedic Anatomy." UVM Medical Center Blog. November 5, 2014.
- 8. Endres NK. "Cycling Injuries." Vermont Sports Magazine. June 2015
- 9. Endres NK. "Too Hot to Trot. What You Need to Know About Heat Illness." UVM Medical Center Blog. August 13, 2015.
- 10. Endres NK. "Is the Heat Making You Sick?" Vermont Sports Magazine. August 2015
- 11. Endres NK. "Bad (Clavicle) Breaks" Vermont Sports Magazine. August 2016.

### SCIENTIFIC PRESENTATIONS:

1. Ettlinger CF, Shealy JE, Endres NK, Johnson RJ, Kim S. "Analysis of Potentially Equipment Related Injuries in Snowboarding." Meeting of F27 Committee of the American Society of Testing and Materials, Burlington, VT. July 23, 2006.

2. Johnson RJ, Endres NK, Kim S, Ettlinger CF, Shealy JE. "Epidemiology of Snowboarding and Skiing Injuries." Meeting of F27 Committee of the American Society of Testing and Materials, Burlington, VT. July 23, 2006.

3. Johnson RJ, Endres NK, Kim S, Ettlinger CF, Shealy JE. "Epidemiology of Snowboarding and Skiing Injuries." 17th International Symposium on Ski Trauma and Skiing Safety, Aviemore, Scotland, May 13-19, 2007

# **INVITED PRESENTATIONS:**

"Management of Open Tibia Fractures"

### REGIONAL

2002	UVM Department of Orthopaedics and Rehabilitation Grand Rounds "History of AO"	Burlington, VT
2003	UVM Department of Orthopaedics and Rehabilitation Grand Rounds	Burlington, VT

2004	UVM Department of Orthopaedics and Rehabilitation Grand Rounds "Update on the Management of Hip Fractures in the Elderly"	Burlington, VT
2006	UVM Department of Orthopaedics and Rehabilitation Grand Rounds "Traumatic Injuries of the Clavicle"	Burlington, VT
2006	University of Vermont Sports Medicine Conference "Epidemiology of Skiing and Snowboarding Injuries"	Burlington, VT
2007	MGH Sports Medicine Conference "Multidirectional Instability"	Boston, MA
2008	UVM Department of Orthopaedics and Rehabilitation Grand Rounds "Management of Glenohumeral Instability with Associated Bone Loss"	Burlington, VT
2008	Brigham and Women's Hospital Sports Medicine Conference "Management of Glenohumeral Instability with Associated Bone Loss"	Boston, MA
2008	Brigham and Women's Hospital Sports Medicine Conference "Medial Sided Knee Injuries"	Boston, MA
2008	Rehab Gym "Acetabular Labral Tears"	Colchester, VT
2009	University of Vermont Primary Care Sports Medicine Conference "Hip and Groin Injuries in Athletes"	Burlington, VT
2009	Child and Youth Injury Prevention Symposium "Sports Injury Prevention"	South Burlington, VT
2010	New England Shoulder and Elbow Society "Subacromial Decompression-Pro"	Jay Peak, VT
2010	Choice Physical Therapy "Hip and Groin Injuries in Athletes"	Williston, VT
2010	Dee Physical Therapy "Update on ACL Injuries"	South Burlington, VT
2010	AO North America ORP Basic Course "Bone Healing"	Boston, MA
2010	Fanny Allen OR In-Service "ACL Injuries"	Colchester, VT
2011	Edge Physical Therapy "Hip In-Service"	South Burlington, VT

2011	UVM Athletic Training Conference "Management of Acute, Traumatic Patellar Dislocation"	Burlington, VT
2011	Vermont Ski Injuries Round Table "Injuries in Elite Alpine Ski Racers: Review of the Literature"	Waitsfield, VT
2011	PT 360 "Evaluation and Management of Common Hip Problems"	Williston, VT
2011	UVM Department of Orthopaedics and Rehabilitation Grand Rounds "Management of Acute, Traumatic Patellar Dislocation"	Burlington, VT
2011	Northern New England Athletic Training Conference "Hip and Groin Problems in Athletes"	Fairlee, VT
2011	Rehab Gym "ACL Graft Choices and Adult Hip Examination"	Colchester, VT
2011	PT 360 "Acromioclavicular Joint Injuries"	Williston, VT
2011	UVM Athletic Training Conference "Acromioclavicular Joint Injuries"	Burlington, VT
2011	University of Vermont Primary Care Sports Medicine Conference "Femoroacetabular Impingement"	Burlington, VT
2011	University of Vermont Primary Care Sports Medicine Conference "Hip and Groin Problems in Athletes"	Burlington, VT
2012	Vermont Youth Soccer Meeting "Concussions in Young Athletes"	Essex Junction, VT
2013	Vermont Alpine Injury Research Group "Hip Problems in Athletes"	Waitsfield, VT
2013	UVM Department of Orthopaedics and Rehabilitation Grand Rounds "Intra-articular Glenoid Fractures"	Burlington, VT
2013	New England Orthopaedic Society Meeting "Intra-articular Glenoid Fractures"	Brewster, MA
2013	University of Vermont Primary Care Sports Medicine Conference "Hip and Groin Problems in Athletes"	Burlington, VT
2013	VARA Coaches Education Forum "Injuries in Ski Racing and Preliminary Data from the VAIRG Study"	Stowe, VT

2013	Far Post Soccer Meeting "Concussions in Soccer"	Burlington, VT
2014	UVM Department of Orthopaedics and Rehabilitation Grand Rounds "Distal Clavicle Fractures"	Burlington, VT
2014	New England Orthopaedic Society Meeting "Distal Clavicle Fractures"	Jay Peak, VT
2014	VARA Coaches Seminar "ACL Injuries in Alpine Ski Racers"	Pico, VT
2014	OSC Winter Sports Night "ACL Injuries: Anatomy, Evaluation and Treatment"	South Burlington, VT
2015	UVM Department of Orthopaedics and Rehabilitation Grand Rounds "Initial Management of Knee Dislocations"	Burlington, VT
2015	University of Vermont Primary Care Sports Medicine Conference "Articular Cartilage Injuries in the Knee"	Essex, VT
2015	Bolton Valley Ski Patrol "Refresher Course"	BoltonValley, VT
2016	AORN Vermont Chapter Meeting "Knee Ligament Injuries"	Burlington, VT
2016	UVM College of Medicine Orthopaedic Student Interest Group "Common Skiing and Snowboarding Injuries"	Burlington, VT
2016	UVM Department of Orthopaedics and Rehabilitation Grand Rounds "Scapulothoracic Dissociation"	Burlington, VT
2016	Depuy Synthes Nursing Continuing Education Orthopaedic Smart Lab "Indications for ORIF Proximal Humerus Fractures"	Burlington, VT
2016	Vermont Ski and Ride Expo "Common Skiing and Snowboarding Injuries"	Burlington, VT
2016	Green Mountain Valley School "Knee Injuries in Ski Racing"	Waitsfield, VT
2016	Bolton Valley Ski Patrol "Refresher Course"	Bolton Valley, VT
2017	New England Orthopedic Society Spring Meeting "The Glenoid Track"	Jiminy Peak, MA

2017	UVM Department of Orthopaedics and Rehabilitation Grand Rounds "Indications for ORIF Clavicle Fractures 2017"	Burlington, VT
NATIO	DNAL	
2006	Harvard EMG and Clinical Neurophysiology Conference "Neurologic Problems in the Shoulder seen by a Shoulder Specialist"	Cambridge, MA
2011	AO Basic Principles and Techniques of Operative Fracture Management "Proximal Humerus Fractures: An Overview"	Boston, MA
2011	Smith and Nephew/DJO Fellowship Meeting Fall Session "The Role of Arthroscopic Simulators in Education"	Andover, MA
2017	AO Advanced Principles of Fracture Management "Clavicle Fractures:Indications and Techniques" Proximal Humerus Fracture Lab	La Jolla, CA

# Current Research Projects

1. Co-Investigator- CHRMS 15-293 "Does the use of an intramedullary fibula strut allograft prevent loss of reduction in 2 and 3 part proximal humerus fractures that were varus aligned at the time of surgery, prior to reduction and fixation?"