| | | Harvard Medical Form | School/Harvard School of Dental M nat for the Curriculum Vitae | ledicine |
|------------------|-------|---|---|---|
| Date Prepare | ed: | November 5, 2015 | | |
| Name: | | Jeffrey L. Zilberfa | rb, M.D. | |
| Office Addre | ss: | 1101 Beacon St, Sui Brookline MA, 0244 | ite 5W 46 | |
| Work Phone: | : | 617-232-2663 | | |
| Work Email: | | jzilberf@BIDMC.ha | arvard.edu | |
| Work FAX: | | 617-232-6342 | | |
| I | | | | |
| Education | | | | |
| 1980 | BA | | | University of Virginia, |
| 1985 | MD | | Medical Doctor | University of Virginia, Charlottesville VA |
| Postdoctoral | Traiı | ning | | |
| 1980-1981 | Rese | earch Assistant | Arthritis Division | University of Virginia, |

| 1700 1701 | researen i issistant | | Charlottoguille VA |
|---------------|---------------------------------|--------------------|--|
| 1985-1986 | Intern | Surgery | Naval Hospital, San Diego |
| 1988-1992 | Resident | Orthopedics | Naval Hospital, San Diego CA |
| 1994-1995 | Rowe Shoulder Fellow | Orthopedics | Massachusetts General Hospital, Boston MA |
| Faculty Acad | emic Appointments | | |
| 1995-2006 | Clinical Instructor | Orthopedic Surgery | Harvard Medical School |
| 2006-2014 | Assistant Clinical Professor | Orthopedic Surgery | Harvard Medical School |
| 2014- present | Assistant Professor | Orthopedic Surgery | Harvard Medical School |

-Part time

Appointments at Hospitals/Affiliated Institutions

| 1986-1988 | General Medical Officer Batallion 1/1 | | United States Marine Corps, Camp Pendleton |
|------------------|--|--------------------|---|
| 1992-1994 | Orthopedic Surgeon | Orthopedic Surgery | CA Camp Lejeune NC |
| 1994-1995 | Assistant in Orthopedic Surgery | Orthopedic Surgery | Massachusetts General Hospital, Boston MA |
| 1995- present | Staff Orthopedic Surgeon | Orthopedic Surgery | Beth Israel Deaconess Medical Center, Boston MA |
| 1998- present | Staff Orthopedic Surgeon | Orthopedic Surgery | New England Baptist Hospital, Boston MA |

Other Professional Positions

| 1981-1985 | Ensign | United States Naval Reserve |
|-----------|-----------------------------------|-----------------------------|
| 1985-1990 | Active Duty, Lieutenant | United States Naval Reserve |
| 1990-1994 | Active Duty, Lieutenant Commander | United States Naval Reserve |

Major Administrative Leadership Positions

| Local | | |
|-------------------|------------------------|--------------------------------------|
| 1997-2011 2012 | Treasurer President | Meeks and Zilberfarb Orthopedics, PC |

National and International

| 1992-1994 | Quality Assurance Officer, Department of | Camp Lejeune NC |
|-----------|--|-----------------|
| | Orthopedics | |

Committee Service

| National and International | | | | |
|----------------------------|---------------------------|--|--|--|
| 1984 | Admissions Committee | University of Virginia Medical School, | | |
| | | Charlottesville VA | | |
| 1993-1994 | Medical Records Committee | Camp Lejeune Naval Hospital, Camp | | |
| | | Lejeune NC | | |
| 1995-1997 | Trauma Committee | Beth Israel Deaconess Medical Center, | | |
| | | Boston MA | | |
| 1995-1997 | Transfusion Committee | Beth Israel Deaconess Medical Center, | | |
| | | Boston MA | | |

Professional Societies

| 1981 | American Medical Society |
|-----------|---|
| 1985-1994 | Society of Military Orthopedic Surgeons |
| 1996 | Fellow, American Academy of Orthopedic |
| | Surgeons |
| 1997 | Massachusetts Orthopedic Association |
| 2000 | International Federation of Sports Medicine |
| 2001 | American College of Sports Medicine |
| 2001 | Arthroscopy Association of North America |
| | (AANA) |
| 2001 | Northeast Medical Association |

Honors and Prizes

| 1982 | Ciba-Geigy |
|-----------|------------------------|
| | Community Service |
| | Award |
| 1984 | Omicron Delta Kappa |
| 1984 | Merck, Sharp, and Dohm |
| | Travel Scholarship |
| 1988-1992 | Military Service |
| | Decorations |

2007 Orthopedics Department Teacher of the Year Award

2011 Nominee, Harvard Medical School Charles McCabe Faculty Prize for Excellence in Teaching (Years III & IV)

Report of Funded and Unfunded Projects

Funding Information

Past

| 1996 | AC Joint Instability Study |
|------|----------------------------|
| | Howmedica, Accufex, Mitek |
| | PI |

Fleet Marine Force Medal; Naval Sea Service Medal; Naval Pistol Expert Medal; National Defense Medal

Current Unfunded Projects

Shoulder Instability AC Joint Injuries

Report of Local Teaching and Training

Teaching of Students in Courses

| 1992-1994 | Various Orthopedic topics Primary Care Physicians, Naval Hospital, Camp Leieune NC Lecturer | Preparation time 4 hours. Contact time/year 4 hours. |
|--------------------|---|---|
| 1995-2004 | 3 rd Year HMS Student Ambulatory Surgery Rotation 8 Medical Students Instructor | Preparation time 1 hour. Contact time 6 week rotation. |
| 1995- | 4 th Year HMS Student Orthopedic Surgery | Preparation time 1 hour. Contact time/year |
| present | Elective | 4-6 times |
| - | 1 Medical Student Preceptor | |
| 1995-2010 | Internal Medicine Ambulatory Medicine Elective | Preparation time 1 hour. Contact time/month 12 hours |
| 1996-2011 | Harvard Primary Care Internal Medicine Course | |
| 1997-2010 | Harvard Medical School Primary Care Physicians throughout the US Lecturer HMS IV Elective Sports Medicine 6-8 Medical Students (International) Instructor | |
| 2000-2005 | HMS III Surgery Core Clerkship 10 Medical Students Lecturer | Preparation time 1 hour. Contact time 3 hours. |
| 2006- | Teaching of Harvard Medical Students | |
| present | Second Year PDII Musculoskeletal Classes | |
| Formal Teac | ching of Residents, Clinical Fellows and Rese | earch Fellows (post-docs) |
| 1994-1995 | Bedside Instruction in Office and Operating Room Procedure 1 Harvard Orthopedic Resident, Massachusetts General Hospital, Boston MA Lecturer | Preparation time 2 hours. Contact time/month 60-70 hours. |
| 1998-2001 | Core Curriculum | Preparation time 8 hours. Contact time/year |

25 Harvard Orthopedic Residents Lecturer 2 hours

Clinical Supervisory and Training Responsibilities

| 1995-2003 | Attending Orthopedic Surgeon Supervising Annually 24 Harvard Combined Orthopedic Residents (4 per rotation), 12 Interns, 48 | Harvard Medical School |
|--------------|---|------------------------|
| | Medical Students | |
| 2003-present | Attending Orthopedic Surgeon Supervising | Harvard Medical School |
| | Annually 8 Harvard Combined Orthopedic | |
| | Residents (1 per rotation), 12 Interns, 8 | |
| | Medical Students | |
| 2012 | Harvard Orthopedic Resident Core | |
| | Curriculum "Knot Tying" | |
| 2015 | Harvard Orthopedic Resident Intern | |
| | Bootcamp | |

Laboratory and Other Research Supervisory and Training Responsibilities

| 1997 | Established an arthroscopy laboratory with | Massachusetts General Hospital, Boston |
|------|--|--|
| | Dr. Gary Perlmutter | MA |

Formally Supervised Trainees

| 3 months | David Ring, MD | Staff Attending, Massachusetts General Hospital, Boston MA |
|----------|----------------------|--|
| 3 months | Kevin Bozic, MD | Staff Attending, UCSF |
| 3 months | David Gazzaniga, MD | Lake Success, NY |
| 3 months | Shahram Sohlpour, MD | Fullerton, CA |

Local Invited Presentations

| 1997 | Common Foot and Ankle Injuries, Primary Care Seminar |
|-----------|--|
| | Beth Israel Deaconess Medical Center, Boston |
| 1997 | Thesis Day, Harvard Community Orthopedic Program |
| | Harvard Medical School, Boston |
| 1998 | Proximal Humerus Fractures |
| | Spaulding Rehabilitation Hospital, Boston |
| 1998-2001 | "Rotator Cuff Disorders" Orthopedic Core Curriculum |
| | Harvard Medical School |
| 1999 | Plastic Surgery Grand Rounds: Thoracic Outlet Syndrome |
| | Beth Israel Deaconess Medical Center, Boston |
| 2007 | CFO/GME Transition Course for Beth Israel Medical Center Residents and Fellows |
| 2014 | "Prevention of Common Tennis Injuries," Longwood Cricket Club, Chestnut Hill, MA |
| 2014 | "Prevention of Winter Sports Injuries," New England Baptist Hospital, Dedham, MA |
| 2015 | "Common Shoulder Injuries," New England Baptist Hospital, Dedham, MA |
| | |

Report of Clinical Activities and Innovations

Current Licensure and Certification

| 1986 | Physician and Surgeon, Medical Board of California |
|------|---|
| 1994 | Board of Medical Examiners of the State of North Carolina |
| 1994 | Board of Medicine, Commonwealth of Virginia |
| 1994 | Physician and Surgeon, Commonwealth of Massachusetts |
| 1994 | American Board of Orthopedic Surgery (recertified 2015) |
| 2011 | Certificate of Added Qualification in Sports Medicine |

<u>Clinical Innovations</u>

1. Description of clinical practice

My major field of interest is Sports Medicine and Upper Extremity Disorders. My areas of major focus are minimally-invasive surgery and the treatment of sports injuries. I primarily see patients at my office at 1101 Beacon Street in Brookline but also see patients at 40 Allied Drive in Dedham. I primarily perform surgery at the BIDMC facility in the Longwood area. I am also on the staff at the New England Baptist Hospital. More than 10,000 office visits are attended either by me or my associates annually which offers a wealth of clinical exposure for our medical residents and senior medical student (HMS OS course 501.1), and the HMS III on rotation.

2. Patient Load

I treat the entire spectrum of sports, nerve, and upper extremity injuries, including brachial plexus and thoracic outlet syndrome disorders. The complexity of my surgical procedures ranges from simple diagnostic arthroscopy to shoulder arthrodesis and knee ligament reconstruction (See clinical contributions below). My referral base consists of primary care physicians both within and without BIDCO as well as other orthopedists throughout the New England region and beyond.

3. Clinical Contribution

My clinical contributions include the introduction of minimally-invasive shoulder, elbow, knee and ankle procedures to the BIDMC community: Open Bankart repair of the shoulder Arthroscopic Bankart repair of the shoulder Shoulder arthrodesis Clark's pectoral transfer Open reduction and internal fixation (ORJF) of complex humerus nonunions ORIF of clavicle fracture nonunions ORIF of clavicle fracture nonunions ORIF of supracondylar elbow fractures Anterior cruciate ligament (ACL) reconstruction arthroscopy with small incisions Use of an allograft for outpatient ACL reconstructions ACL reconstructions as routine outpatient procedure Arthroscopic surgery of the ankle

Report of Technological and Other Scientific Innovations

1995-present Implemented Orthopedic Consultancies in Arthroscopy and Sports Medicine at Beth Israel Hospital, Northeastern University, and Hanscom Air Base in conjunction with my former partner, Dr. Louis Meeks.

Report of Education of Patients and Service to the Community

Activities

| 1979-1982 | Volunteer Emergency Medical Technician |
|--------------|---|
| | Charlottesville-Aibermarie Rescue Squad, Charlottesville VA |
| 1994-1995 | Provided volunteer medical coverage |
| | Harvard University wrestling/hockey matches |
| 1994-1995 | Provided volunteer medical coverage |
| | Harvard University training facility |
| 2000 | Volunteer Physician |
| | Park School |
| 2013-present | Orthopedic Consultant |
| - | Wheelock College |
| | Wentworth College |
| | Dedham High School |

Report of Scholarship

Peer reviewed publications in print or other media

A. Research articles

- 1) Zilberfarb, J.L., Andrews, BA, Young, A.C. and Davis, J.S.: "Enhancement of C1Q Binding Activity by IgM Rheumatoid Factor," *Journal of Rheumatology*. 12, June, 1985
- Peterson, D., Zilberfarb, J.L., Greene, M. and Colgrove, R.: "Avascular necrosis of the First Metatarsal Head: incidence in distal osteotomy combined with lateral soft tissue release," *Foot and Ankle*. 15: 59-63, 1994
- Mologne, TS, Lapoint, JL, Morin.WD, Zilberfarb, JL and O'Brien, TJ: Arthroscopic anterior labral reconstruction using a transglenoid suture technique: Results in Active-Duty military patients. *AJSM*. May,June 24 (3):268-274,1996.
- Sutherland, DH, Zilberfarb, JL, et al: "Psoas Release at the Pelvic Brim in Ambulatory Patients with Cerebral Palsy: Operative Technique and Functional Outcome," JPO. 17 (5):563-570, 1997.
- 5) Hochman, MG, Min, KK and **Zilberfarb**, JL: MR Imaging of the Symptomatic Ankle and Foot," *OCNA*. 10/97, 659-683, 1997.

- 6) Ring, D, Jupiter, J and **Zilberfarb, JL**: Posterior Dislocation of the Elbow with Fractures of the Radial Head and Coronoid. *JBJS*. 84-A: 547-551, April, 2002.
- 7) Hochman, MG, Min, KK, and **Zilberfarb, JL**: Nerves in a Pinch: Imaging of Nerve Compression Syndromes. *RCNA*. 42 (1): 221-45, 2004.
- 8) Deshmukh, AV, Perlmutter, GS, **Zilberfarb, JL**, and Wilson, DR ,: Effect of Subacromial Decompression on the Stability of the AC Joint: Biomechanical testing in a Cadaveric Model. *JSES*. 13 (3): 338-43, 2004.
- Deshmukh, AV, Wilson, DR, Zilberfarb, JL, and Perlmutter, GS. Stability of AC Joint Reconstruction: Biomechanical testing of Various Surgical Techniques in a Cadaveric Model. *AJSM*. (6): 1492-8, Sept 2004.
- Wilson, DR, Moses, JM, Zilberfarb, JL, and Hayes, WC: Mechanics of Coracoacromial Ligament Transfer Augmentation for Acromioclavicular Joint Injuries. *J Biomech.* 38 (3): 615-19, 2005.

Non-peer reviewed scientific or medical publications/materials in print or other media

Reviews, Chapters, Monographs and Editorials

- 1) **Zilberfarb, J.L**., Hennrikus, W., Larocco, A. and Ungersma, J.: "Septic Bursitis: A Prospective, Randomized Comparison of Three Different Drainage Methods," Surgical Forum, 10/92, 1992.
- 2) **Zilberfarb JL**. The elbow and forearm. In: Gates SJ, Modar PA, Eds. "Musculoskeletal Primary Care." NY: Lippincott, 1999.
- 3) Deshmukh A, Wilson D, **Zilberfarb JL**, Perlmutter G. "The Biochemechanics of AC Instability" *Harvard Orthopedic Journal*, 1999.
- 4) **Zilberfarb JL**. The Elbow. In: Warfield, C., Ed. Manual of Pain Management. 2nd edition. NY: Lippincott, 2002.
- 5) **Zilberfarb, J.L.**, Vernick, G., and Richardson,L.: Open Reduction and Internal Fixation of Displaced Midshaft Clavicle Fractures. *Harvard Orthopedic Journal*, 2009,

Narrative Report

I am an orthopedic surgeon at Beth Israel Deaconess Medical Center where I devote approximately 75% of my time to clinical practice and 25% to formal teaching and research activities. Situated within a teaching hospital, I have, for the majority of the past ten years, supervised 4 Harvard Combined Orthopedic residents per rotation (24 per year) plus 12 interns and 48 medical students which means teaching, training, and mentoring have been integrated into daily practice. However, more recently my main teaching activities are surgical and clinical instruction of senior-level orthopedic residents, in addition to instruction of third and fourth year medical students in the office and operating room. I have received the outstanding orthopedic resident teaching award and nominated to receive the Daniel Federman medical student teaching award. Over the past several years, I have been invited to lead a workshop on Shoulder and Neck Disorders at the Harvard Primary Care Internal Medicine annual Course and have received an award for Outstanding Performance.

My surgical specialty is minimally invasive surgery of the shoulder, elbow, knee and ankle. I have helped develop arthroscopic shoulder stabilization techniques which are now routine in clinical practice. These techniques are done in an outpatient versus inpatient setting and have decreased morbidity and rehabilitation time compared to open techniques.

My research endeavors have encompassed basic science biomechanical studies and clinical studies relating to sports medicine and upper extremity disorders. I have collaborated successfully with Dr. Mary Hochman, section chief of Musculoskeletal Imaging in the Department of Radiology to produce the paper, *MR Imaging of the Symptomatic Ankle and Foot (Original Article #6)* which has had significant impact on the field because it clarified the role of MR imaging in the diagnosis of common and uncommon ankle and foot disorders. I co-authored a paper presented at the AAOS meeting in 2000, *Effect of Subacromial Decompression on the Stability of the Acromioclavicular Joint: Biomechanical testing in a Cadaveric Model*, which was nominated for the Neer Award recognizing the best shoulder paper at the conference. In 2004 I coauthored a paper, *Stability of Acromioclavicular Joint Reconstruction: Biomechanical Testing of Various Surgical Techniques in a Cadaveric Model (Original Article #9)*, which has had great influence on the performance of this procedure.