BIOGRAPHICAL SKETCH

NAME: Walton, Zeke J

eRA COMMONS USER NAME (credential, e.g., agency login): XXXXX

POSITION TITLE: Assistant Professor, Department of Orthopaedics and Physical Medicine; MUSC and Ralph H. Johnson VAMC

EDUCATION/TRAINING (Begin with baccalaureate education, include postdoctoral training and residency training if applicable.)

| INSTITUTION AND LOCATION | DEGREE  (if applicable) | Completion Date  MM/YYYY | FIELD OF STUDY |
| --- | --- | --- | --- |
| University of South Carolina | B.S. | 05/2003 | Biology |
| Medical University of South Carolina | M.D. | 05/2008 | Medicine |
| Medical University of South Carolina | Residency | 08/2013 | Orthopaedic Surgery |
| Emory University | Fellowship | 08/2014 | Musculoskeletal Oncology & Joint Reconstruction |

A. Personal Statement

I am an Assistant Professor and Orthopaedic Surgeon at the Ralph H. Johnson VAMC and at the Medical University of South Carolina in Charleston SC. While my primary activities are clinical in nature, I have been actively involved in a number of research programs and projects over the past several years. I have experience conducting research in surgical populations with emphases on surgical techniques, orthopaedic surgical complications and outcomes, and surgical oncology. I routinely conduct total knee arthroplasty (TKA) surgery at the Ralph H. Johnson VAMC in Charleston SC and am excited to work on this project with Dr. Borckardt looking at a very novel approach to reducing postoperative pain, opioid use and functional impairment due to pain. I will be involved with participant recruitment, enrollment, and retention as well as providing assistance in research safety monitoring and evaluating cases for appropriateness for the study interventions. Much of my previous work is directly related to my proposed role on the present project including reviews and recommendations about surgical safety considerations, optimizing surgical outcomes

**a**. Barfield WR, Holmes RE, Slone H, **Walton Z,** Hartsock LA. Acute versus Staged Surgical Intervention in Multiligamentous Knee Injuries: A Review of the Literature Since 2009. Current Orthopaedic Practice: September/October 2015 - Volume 26 - Issue 5 - p 530–535. doi: 10.1097/BCO.0000000000000268

**b**. **Walton, Z**, Holmes R, and Leddy L. Total Hip Arthroplasty in a Patient with a Left Ventricular Assist Device. JBJS Case Connector, 2014 Jul 23;4(3):e61.

**c**. **Walton Z,** Bowman S, Slone H, Barfield W, Shealy G. The Clinical Implications of Heterotopic Ossification in Patients Treated with Radial Head Arthroplasty for Trauma. Journal of Orthopaedics. July, 2016. 28;13(4):272-7. doi: 10.1016/j.jor.2016.06.011

**d**. Romero N, Glaser J, **Walton Z.** Are Routine Radiographs Needed in the First Year After Lumbar Fusion Surgery? Spine.34; 18: 1578-1580

**B. Positions and Honors**

*Positions:*

2015-present *Assistant Professor*; Department of Orthopaedics and Physical Medicine; MUSC

2015-present *Orthopaedic Surgeon*; Ralph H. Johnson VAMC; Charleston SC

2009 *Physician Liaison*; ESPN Winter X Games

2005 *Research Assistant*; Duke University Medical Center

2004 *Teaching Assistant*; Medical University of South Carolina; Anatomy

2001-2004 *Patient Assistant;* St. Francis Hospital; Greenville, SC

*Honors and Awards:*

MUSC Innovation Committee, 2016- present

American Orthopaedic Association Emerging Leaders Forum Member, 2013-present

Interim Chair, Ralph H. Johnson VA Cancer Committee, 2015-2016

Chair, Ralph H. Johnson VA Tumor Board, 2015-present

Curriculum Developer, Ralph H. Johnson VA Orthopaedics, 2014-present

Musuloskeletal Tumor Society- MORI member 2014-present

MUSC Department of Orthopaedics Educator of the Year, 2017

Departmental Education Committee, 2014-present

Departmental Research Committee, 2014- present

Editorial Board Member/Reviewer: American Journal of Orthopaedics; Skeletal Radiology

Faculty Senate Member, Medical University of South Carolina, 2015-2017

MUSC Faculty Excellence Educator of the Block Award, 2015

Thomas A. Siegling Research Competition- Second Place, 2013

Alpha Omega Alpha (AOA), 2007

Civilian Departmental Award of Commendation 2004, City of Charleston and Mayor Joe P. Riley

Phi Beta Kappa, 2003

Golden Key, 2002

Alpha Epsilon Delta, President, 2002

C. Contributions to Science

**Overview**

While my primary responsibilities at the Ralph H. Johnson VAMC are clinical in nature, I remain actively involved in research, medical student, resident and fellow education. I have published over a dozen scientific papers, and have given over 50 scientific presentations and posters. Much of my scholarly research work has focused on surgical technique, surgical complications, unique cases, surgical outcomes, and surgical oncology.

*Link to my pubmed.gov bibliography: https://www.ncbi.nlm.nih.gov/pubmed/?term=walton+zeke*

**1. Evaluation of Approaches to Knee and Back Surgery and Risk of Ossification**

Throughout my career as an Orthopaedic Surgeon, I have published several scientific papers related to best practices in knee surgery, lumbar fusion, and risks associated with ossification. Many of these publications represent scientific review papers, and overviews of current surgical and post-surgical practices.

**a**. Barfield WR, Holmes RE, Slone H, **Walton Z,** Hartsock LA. Acute versus Staged Surgical Intervention in Multiligamentous Knee Injuries: A Review of the Literature Since 2009. Current Orthopaedic Practice: September/October 2015 - Volume 26 - Issue 5 - p 530–535. doi: 10.1097/BCO.0000000000000268

**b**. **Walton Z,** Bowman S, Slone H, Barfield W, Shealy G. The Clinical Implications of Heterotopic Ossification in Patients Treated with Radial Head Arthroplasty for Trauma. Journal of Orthopaedics. July, 2016. 28;13(4):272-7. doi: 10.1016/j.jor.2016.06.011

**c**. Romero N, Glaser J, **Walton Z.** Are Routine Radiographs Needed in the First Year After Lumbar Fusion Surgery? Spine.34; 18: 1578-1580

**d**. Slone HS, **Walton Z**, Daly CA, Chapin RW, Barfield WR, Leddy L, Hartsock LA. The impact of race on the development of severe heterotopic ossification following acetabular fracture surgery. Injury. 2015;46(6):1069-73. doi: 10.1016/j.injury.2015.01.039

**2. Orthopaedic Complications, Techniques, and Unique Cases**

As a surgeon in academic medical centers, I often have the opportunity to share with the scientific community lessons-learned and innovative techniques discovered during surgical practice on unique patient cases. I have published several papers related to surgical techniques and observations from unique cases.

**a**. **Walton, Z**, Holmes R, and Leddy L. Total Hip Arthroplasty in a Patient with a Left Ventricular Assist Device. JBJS Case Connector, 2014 Jul 23;4(3):e61.

**b**. O’Callaghan P, Bruner E, Chapin R, **Walton Z**. Heterotopic Ossification Formation Following a Simple Concussion. A Case Report. Accepted JBJS Case Connector. Estimated Publication Date May, 2018.

**c**. Bernard M, **Walton Z**, Rumboldt Z. Absence of Decussation of the Superior Cerebellar Peduncles in Patients with Joubert Syndrome. American Journal of Medical Genetics. Vol 146A; 11: 1389-1394.

**d**. **Walton Z**, Armstrong M, and Leddy L. Surgical Technique of Pedicled Rotational Medial and Lateral Gastrocnemius Flaps. J Am Acad Orthop Surg. 2017 Nov;25(11):744-751. doi: 10.5435/JAAOS-D-15-00722

**3. Musculoskeletal Oncology & Joint Reconstruction**

During my Fellowship in Musculoskeletal Oncology & Joint Reconstruction at Emory University, I developed an interest in optimizing surgical efficacy and outcomes in oncology. I have since published several papers related to interesting cases as well as systematic reviews of current and best practices in musculoskeletal oncology.

**a**. **Walton Z**, Kayser D, Bruner E, Chapin R. Myxofibrosarcoma: First report of myxofibrosarcoma of bone arising at a bone infarct. Skeletal Radiology. 2017 Aug;46(8):1143-1147. doi: 10.1007/s00256-017-2651-4. Epub 2017 Apr 21

**b**. The PARITY Investigators. Prophylactic antibiotic regimens in tumour surgery (PARITY): a pilot multicentre randomised controlled trial. Bone Joint Res. 2015 Sep; 4(9): 154-62. PMID: 26423584

**c**. **Walton Z**, Holmes R, Leddy, L. Bronchogenic Squamous Cell Carcinoma with Soft Tissue Metastasis to the Hand: An Unusual Case Presentation and Review of the Literature. Am J Orthop (Belle Mead NJ). 2014 Dec;43(12):E324-7.

**d**. Oskouei S, **Walton Z.** Treatment of metastatic disease to the tibia, ankle, and foot. Current Orthopaedic Practice. November/December 2014 - Volume 25 - Issue 6 - p 554–557.

D. Active Research Support

Completed Research Support (past 3 years)