

CURRICULUM VITAE

NICHOLAS M. BERNTHAL, M.D.

PERSONAL

David Geffen School of Medicine at UCLA
Department of Orthopaedic Surgery
1250 16th Street, Suite 3142
Santa Monica CA, 90404

Clinical (424) 259-9860
Laboratory (310) 825-3399
Fax (424) 259-8934
Email nbernthal@mednet.ucla.edu

EDUCATION

B.A., **Princeton University** 1998-2002
Princeton, New Jersey, 08544, (609) 258-3040
Graduated *magna cum laude*
Graduated with *Phi Beta Kappa* honors

Semester Abroad, **University of Cape Town** 2001
Rondebosch, South Africa 7701, +27 21 650 2822
Metal of Outstanding Achievement, Political Science

M.D., **Cornell University**, Weill Cornell School of Medicine 2002-2006
1300 York Avenue, New York, NY 10065, (212) 746-5454
Graduated with *Alpha Omega Alpha* honors

POST GRADUATE TRAINING

Internship

General Surgery, University of California, Los Angeles July 2006-June 2007
Department of Surgery
David Geffen School of Medicine at UCLA
RM 72-235 CHS
10833 Le Conte Ave
Los Angeles, CA 90095

Residency

Orthopaedic Surgery, University of California, Los Angeles July 2007-June 2012
Department of Orthopaedic Surgery
David Geffen School of Medicine at UCLA
RM 76-143 CHS
10833 Le Conte Ave
Los Angeles, CA 90095

Fellowships

Fellow in Musculoskeletal Oncology August 2012-July 2013
Huntsman Cancer Institute/University of Utah

Mentor: R. Lor Randall, M.D., FACS (801-585-0206)
2000 Circle of Hope, Salt Lake City, UT 84112

Fellow in Orthopaedic Research
UCLA Orthopaedic Hospital Research Center
Mentor: John S. Adams, M.D. (310-267-5585)
615 Charles E. Young Dr. South, Los Angeles CA 90095

July 2008-June 2009

LICENSURE AND BOARD CERTIFICATION

State of California, Physician and Surgeon 2008-present
State of Nevada, Physician and Surgeon 2018-present

BOARD CERTIFICATION

Board Certified, American Board of Orthopaedic Surgery 2015-present

PROFESSIONAL EXPERIENCE

Academic Appointments

Associate Professor, Dept. of Orthopaedic Surgery 2018-present
David Geffen School of Medicine at University of California, Los Angeles

Chief, Musculoskeletal Oncology, Dept. of Orthopaedic Surgery 2016-present
David Geffen School of Medicine at University of California, Los Angeles

Director, UCLA Orthopaedic Oncology Fellowship 2018-present
David Geffen School of Medicine at University of California, Los Angeles

Director, Global Orthopaedic Initiative, Dept. of Orthopaedic Surgery 2015-present
David Geffen School of Medicine at University of California, Los Angeles

Assistant Professor in Residence, Dept. of Orthopaedic Surgery 2013-2018
David Geffen School of Medicine at University of California, Los Angeles

Hospital Appointments

Attending Surgeon, UCLA Medical Center 2013-present
Attending Surgeon, UCLA Santa Monica Hospital 2013-present
Attending Surgeon, Orthopaedic Institute for Children 2013-present

Special Appointment

Team Physician, Watts Bears Football Program 2015- present

PROFESSIONAL ACTIVITIES

Society Memberships

Member, Musculoskeletal Tumor Society (MSTS)
Member, Connective Tissue Oncology Society (CTOS)
Associate Member, American Academy of Orthopaedic Surgeons (AAOS)
President, Western Orthopaedic Association, Los Angeles Chapter (WOA)
Member, Jonsson Comprehensive Cancer Center (JCCC)
Member, The American Orthopaedic Association (AOA)

Associate Member, F1000
 Member, Orthopaedics Overseas
 Elected Resident Representative (UCLA), California Orthopaedic Association (2009)

Invited Scholarly Society Memberships

Member, Interurban Orthopaedic Club

Editorial Service

Reviewer: Clinical Orthopaedics and Related Research	2012-current
Journal of Surgical Oncology	2013-current
BioMed Research International	2013-current
Orthopaedic Research and Education Foundation (OREF) Grants	2013-current
Guest Editor, The Scientific World Journal, Special Symposium on Implant Infections	2014
Biomaterials	2015-current
Scientific Reports	2016-current
Bone and Joint Journal	2017-current

COMMITTEES

UCLA Department of Orthopaedic Surgery, Resident Selection Committee	2007-present
Elected Representative UCLA Hospital JCAHO Site Review	2009
Orthopaedic Resident Education Committee	2009-2012
Executive Research Committee	2010-present
Global Health Committee	2014-present
Residency Clinical Competency Committee	2016-present
Chair, Junior Faculty Council UCLA Regenerative Musculoskeletal Medicine T32 Training Grant	2016-present

David Geffen School of Medicine at UCLA

Advisory Committee for UCLA Center for World Health	2013-present
DGSOM Global Health Diversity Committee	2015-present
DGSOM Medical Student Mentorship Program	2016-present
International Advisory Council, Sub-Saharan Africa Subcommittee,	2017-present
DGSOM Gold Humanism Honor Society Selection Committee	2017-present
Faculty Executive Committee, David Geffen School of Medicine	2018-present

Western Orthopaedic Association (WOA), Los Angeles Chapter

Junior Member Chair	2013-2015
Program Director	2015-2016
Secretary/Treasurer	2016-2018
President Elect	2018-present

Musculoskeletal Tumor Society (MSTS)

Specialty Day Program Committee	2017-present
Nominating Committee	2017-present
Executive Committee	2017-2019

Orthopaedic Research and Education Society (OREF)

Research Grants Committee	2017-present
Board of Directors	2017-present

Teaching

Medical Student Gross Anatomy, Musculoskeletal Section	2013-present
Department of Orthopaedic Surgery, Orthopaedic Oncology Block	2013-present
T32 Musculoskeletal Training Grant, Orthopaedic Immunology	2014-present

Mentor/Advisor

Undergraduate Students:

Amanda Loftin (UCLA, class of 2014)

Dean's Prize Science Award Finalist, UCLA, 2013

Lauren Sullivan (UCLA, class of 2015)

Christopher Hamad (UCLA, class of 2016)

Kellyn Hori (UCLA, class of 2017)

Viola G. Hyde Scholarship Research & Travel Award, 2019

Joshua Proal (UCLA, class of 2018)

Nick Cevallos (UCLA, class of 2019)

Nicole Truong (UCLA, class of 2020)

Rebecca Li (Scripps College, class of 2019)

Amr Turkmani (Chapman, class of 2019)

Doug Dang (UCLA, class of 2020)

Micah Ralston (UCLA, class of 2021)

Medical Students:

Sherif Richman (UCLA, class of 2016)

Jennifer Manegold (UCLA, class of 2017)

Viola G. Hyde Research Travel Award, 2016

Daniel Johansen (UCLA, class of 2017)

Top Presentation, National Students Research Forum, 2017

William Sheppard (UCLA, class of 2018)

Ryan Smith (UCLA, class of 2018)

Marina "Molly" Sprague (UCLA, class of 2019)

Alex Upfill-Brown (UCLA, class of 2019)

Samuel Clarkson (UCLA, class of 2020)

Clark Chen (University of Miami, Miller School of Medicine, class of 2020)

Jonathan Gatto (UCLA, class of 2020)

Cristina Villalpando (UCLA, class of 2020)

2nd Place Presentation, NMA Convention and Scientific Assembly, 2018

National Medical Fellowships, 2018 Zimmer Biomet/NMF Orthopaedic Scholarship

Rishi Trikha (Mt. Sinai, class of 2020)

Sam Uweh Jr. (UCLA, class of 2021)

Troy Sekimura (UCLA, class of 2021)

Brian Zukotynski (UCLA, class of 2021)

Rachel Borthwell (UCLA, class of 2021)

John Hoang (UCLA, class of 2021)

Brenda Iglesias (UCLA, class of 2021)

Ameen Chaudry (UCLA, class of 2022)

Justo Caballero (UCLA, class of 2022)

Thomas Olson (UCLA, class of 2022)

Kellyn Hori (UCLA, class of 2023)

Orthopaedic Surgery Residents (research):

Jon Pribaz, MD (UCLA, class of 2014)
Jared Niska, MD (UCLA, class of 2015)
Alexandra Stavrakis, MD (UCLA, class of 2016)

Longmire Research Society Outstanding Research Award, 2014

California Orthopaedic Association Resident Research Award, 2014

Vernon J. Thompson Western Orthopaedic Association Research Award, 2015

UCLA Academic Day Resident Research Award, 2015

HH Lee Research Grant Award Winner, 2012

Erik Dworsky, MD (UCLA, class of 2018)
Vishal Hegde, MD (UCLA, class of 2019)

Gerald Finerman Research Day Prize for Basic Science, 2017

Howard Park, MD (UCLA, class of 2020)

Gerald Finerman Research Day Prize for Clinical Science, 2017

Steven Zoller, MD (UCLA, class of 2020)

Vernon J. Thompson Western Orthopaedic Associate Research Award for Best Overall Resident Paper Presentation, 2017

Jeannette Wilkins Award at Musculoskeletal Infection Society for Best Basic Science Paper, 2016

Gideon Blumstein, MD (UCLA, class of 2021)
Zachary Burke, MD (UCLA, class of 2021)
Chad Ishmael, MD (UCLA, class of 2022)
Peter Hsiue, MD (UCLA, class of 2022)
Ben Kelley, MD (UCLA, class of 2023)
Danielle Greig, MD (UCLA, class of 2023)

Orthopaedic Surgery Residents (clinical):

Alexandra Stavrakis, MD (UCLA, class of 2016)
Ben Allis, MD (UCLA, class of 2017)
Ajay Gurbani, MD (UCLA, class of 2018)
Dane Brodke, MD (UCSF, class of 2018)
Gina Mosich, MD (UCLA, class of 2020)
Myra Trivellas, MD (UCLA, class of 2022)
Alexander Upfill-Brown, MD (UCLA, class of 2024)

Post-Doctoral Fellows

Weixian Xi, PhD (China) (2015-2018)
Zeinab Mamouei, PhD (2019-Present)

UCLA School of Nursing:

Gerardo Flores (2015-2016 Dissertation Committee)

International Fellows:

Chadhanarat Chandhanayingyong, MD (Thailand) (2014-15)
Yan Hu (China) (2014-16)
Justine Janssen, MD (Belgium) (2015)
Pakjai Tuntarattanapong, MD (Thailand) (2015-16)
Weixian Xi (China) (2015-2018)

Research Post-Doctoral T32 Research Fellows:

Howard Park, MD (2016-present)

Steven Zoller, MD	(2016-present)
Gideon Blumstein, MD	(2017-present)
Zachary Burke, MD	(2017-present)
Chad Ishmael, MD	(2018-present)
Peter Hsiue, MD	(2018-present)
Danielle Greig, MD	(2019-present)

HONORS AND SPECIAL AWARDS

USA Today High School Football All-American – Honorable Mention 1998
 Thomas Sidwell Award for Overall Contributions to the Community, Sidwell Friends School 1998
 Medal of Outstanding Achievement, University of Cape Town, Department of Political Science 2001
 Phi Beta Kappa, National Honor Society, Princeton University 2002
Magna cum laude, Princeton University, Department of Politics 2002
 Alpha Omega Alpha, National Honor Society, Cornell University Medical College 2005
 B.H. Kean Award for Public Health – Cornell University Medical College 2006
 Best Paper, Orthopaedic Hospital Research Day. Los Angeles CA 2009
 June Marshall Award for Contributions in Orthopaedic Research 2010
 Outstanding Oral Presentation, Longmire Surgical Society 2011
 OREF Resident Award, California Orthopaedic Association 2011
 Lloyd Taylor Award, Western Orthopaedic Association 2011
 Best Paper, UCLA Department of Orthopaedic Surgery Academic Day 2012
 First Place, OREF/ORS Pacific Coast Resident Research Symposium 2012
 Rising Stars, Southern California SuperDoctors 2014, 2015, 2016
 Jeanette Wilkins Award, Musculoskeletal Infection Society (MSIS) 2016
 Young Investigator Award, Musculoskeletal Tumor Society Annual Meeting (MSTS) 2016, 2017
 Dedicated Service Award, Texas Tech University 2017
 Game Changer Award, American Association of Orthopaedic Surgery (AAOS) 2017
 Leonard Tow Award for Humanism in Medicine, David Geffen School of Medicine at UCLA 2017
 American Orthopaedic Association (AOA) American-British-Canadian (ABC) Traveling Fellow 2017
 Super Doctor, Southern California 2018
 Faculty Teaching Award, UCLA Department of Orthopaedic Surgery 2018
 Super Doctor, Southern California 2019

RESEARCH ACTIVITIES

Orthopaedic Infection Prevention
 Implant Engineering
 Phosphoproteomic/Genomic Assessment of Sarcoma
 Sarcomagenesis of Chondrosarcoma

RESEARCH GRANTS AND FELLOWSHIPS RECEIVED

Research Support/Extramural Funding

1. **Nicholas M. Bernthal, M.D. (P.I.)**
 Department of the Army
 “Low-Complexity, Rugged, and Versatile Hydrogel Wound Dressings in the Era of Prolonged Field Care“
 Project Period: 05/01/20-04/30/23
 Total Award: \$980,642

2. **Alice Soragni, PhD (P.I.), Nicholas M. Bernthal, M.D. (collaborator)**
UCLA DGSOM and CTSI
UCLA David Geffen School of Medicine Cancer Research Theme and Clinical Translational Science Institute Seed Grant Award
“Understanding Sarcoma: From Cell of Origin to Drug Resistance“
Project Period: 10/01/19-09/30/20
Total Award: \$250,000
3. **Nicholas M. Bernthal, M.D. (P.I.)**
2018 David Geffen School of Medicine Seed Grant
“Combating Infection in the Bone Microenvironment: A Multi-faceted Approach to Subvert Antimicrobial Resistance”
Project Period: 09/01/2018- 09/30/2019
Total Award: \$250,000
4. **Nicholas M. Bernthal, M.D. (P.I.)**
National Institutes of Health (NIH) K08
“Modifying and Delivering Antimicrobials to Prevent Orthopaedic Implant Infections”
Project Period: 05/10/2016-08/31/2020
Total Award: \$702,880
Impact Score: 13
5. **Nicholas M. Bernthal, M.D. (P.I.)**
Daiichi Sankyo Co.
“TGCT Observational Platform Project: A Disease Registry for Patients with Tenosynovial Giant Cell Tumors”
Project Period: 04/27/2018-10/31/2020
Total Award: \$66,399
6. **Nicholas M. Bernthal, M.D. (P.I.)**
Perkin Elmer, Inc.
“Orthopaedic Implant Infections: Improving Diagnostic Accuracy with High Optical Sensitivity and Open Air Imaging (“study”)
Project Period: 03/01/2018-02/28/2020
Total Award: \$0
7. **Nicholas M. Bernthal, M.D. (P.I.)**
UCLA Innovation Fund Award
“Antimicrobial Implant Coatings”
Project Period: 01/01/2018-12/31/2018
Total Award: \$200,000
8. **Nicholas M. Bernthal, M.D. (P.I.)**
Orthopaedic Research and Education Foundation (OREF) Mentored Clinician Scientist Award
“Modifying and Delivering Antimicrobials to Prevent Orthopaedic Implant Infections”
Project Period: 07/01/2017-06/30/2018
Total Award: \$20,000
9. **Nicholas M. Bernthal, M.D. (P.I.)**
McMaster University

“Prophylactic Antibiotic Regimens in Tumor Surgery (parity): A Multi-Center Randomized Controlled Study Comparing Alternative Antibiotic Regimens in Patients Undergoing Tumor Resections with Endoprosthetic Replacements”
Project Period: 04/01/2017-03/31/2021
Total Award: \$7,834

10. **Nicholas M. Bernthal, M.D. (P.I.)**
Food and Drug Administration (FDA)
“Modeling Infection with Dermal Fillers”
Project Period: 09/30/2016-09/29/2017
Total Award: \$20,000
11. Howard Park, M.D. (P.I.), **Nicholas M. Bernthal, M.D. (Mentor)**
HH Lee Early Investigator Award
“Vitamin D and Infection”
Project Period: 07/01/2016-06/30/2017
Total Award: \$25,000
12. **Nicholas M. Bernthal, M.D. (P.I.)**
Musculoskeletal Transplant Foundation (MTF)/Musculoskeletal Tumor Society (MSTS)
“Modified Antimicrobial Coatings to Prevent Allograft Infection”
Project Period: 07/01/2016-6/30/2018
Total Award: \$100,000
13. Chia Soo, M.D. (P.I.), **Nicholas M. Bernthal, M.D. (co-P.I.)**
Musculoskeletal Transplant Foundation
“Allograft/DBM Use in Infected Bone Regeneration When Combined with Silver Nanoparticles and BMP2”
Project Period: 07/01/2016-06/30/2018
Total Award: \$300,000
14. Luisa Arispe, Ph.D. (P.I.), **Nicholas M. Bernthal, M.D. (collaborator)**
National Institutes of Health
“Underlying Mechanisms in Angiosarcoma”
Project Period: 07/01/2015-06/30/2020
Total Award: \$1,250,000
15. **Nicholas M. Bernthal, M.D. (P.I.)**
Hartley Family Foundation
“Biodegradable “Smart” Coatings for Endoprostheses”
Project Period: 07/01/2015-06/30/2017
Total Award: \$265,000
16. Aaron James, M.D. (P.I.), **Nicholas M. Bernthal, M.D. (co-P.I.)**
Orthopaedic Research Society/Musculoskeletal Transplant Foundation
“Combining NELL-1 and SHH Signaling for Improved Bone Regeneration”
Project Period: 07/01/2015-06/30/2017
Total Award: \$98,000
17. **Nicholas M. Bernthal, M.D. (P.I.)**, Denis Evseenko, Ph.D. (Co-P.I.), Chris Denny, M.D. (Co-P.I.)
Kure It Cancer Foundation

- “Protein Expression Markers of Aggressiveness in Chondrosarcoma”
Project Period: 07/01/2015-06/30/2016
Total Award: \$125,000
18. Justin Drake, Ph.D. (P.I.), Owen Witte, M.D. (co-P.I.), **Nicholas M. Bernthal, M.D. (Collaborator)**
Department of Defense Idea Development Award
“The Use of Phosphoproteomics to Assess Therapeutic Kinases in Castration-Resistant Prostate Cancer”
Project Period: 07/01/2015-06/30/2017
Total Award: \$346,500
19. Luisa Arispe, Ph.D. (co-P.I.), Fritz Eilber, M.D. (co-P.I.), Antoinette Gomes, M.D. (co-P.I.), **Nicholas M. Bernthal, M.D. (co-P.I.)**
Jonsson Cancer Center Impact Grant
“Genetic Basis of Vascular Tumors”
Project Period: 07/01/2014-06/30/2015
Total Award: \$200,000
20. **Nicholas M. Bernthal, M.D. (P.I.)**, John S. Adams, M.D. (Mentor)
NIH/National Center for Advancing Translational Science (NCATS) UCLA CTSI
“Novel Antibacterial Coatings Preventing Implant Infections”
Project Period: 07/01/2014-06/30/2016
Total Award: \$400,000
21. **Nicholas M. Bernthal, M.D. (P.I.)**
HH Lee Young Faculty Award
“Phosphoproteomics of Osteosarcoma”
Project Period: 07/01/2014-06/30/2015
Total Award: \$25,000
22. **Nicholas M. Bernthal, M.D. (P.I.)**
Clinical and Translational Science Institute (CTSI) Seed Voucher
“Wireless Monitoring of Activity after Orthopaedic Surgery”
Project Period: 07/01/2014-06/30/2015
Total Award: \$10,000
23. **Nicholas M. Bernthal, M.D. (P.I.)**
Orthopaedic Research and Education Foundation (OREF) Young Investigator Award
“Implant Infections and Osseointegration”
Project Period: 07/01/2013-06/30/2015
Total Award: \$50,000
24. Noah Federman, M.D. (P.I.), Arun Singh, M.D. (co-I), Fritz Eilber, M.D. (co-I), **Nicholas M. Bernthal, M.D. (Co-I)**
Jonsson Cancer Center Foundation (JCCF) and Clinical and Translational Science Institute (CTSI) Impact Grant
“Translational Genomics of Sarcoma”
Project Period: 07/01/2013-06/30/2016
Total Award: \$200,000
25. **Nicholas M. Bernthal, M.D. (P.I.)**, Anthony Scaduto, M.D. (co-I)

Pediatric Orthopaedic Society of North America (POSNA) Biomet Spine Award
“Preventing Spinal Implant Infections”
Project Period: 07/01/2013-06/30/2014
Total Award: \$30,000

26. **Nicholas M. Bernthal, M.D. (P.I.)**, Mauricio Silva, M.D. (co-P.I.)
Orthopaedic Hospital Research Grant
“The Mechanical Strength of Different K-Wire Fixation Patterns in Supracondylar Humerus Fractures”
Project Period: 07/01/2010-06/30/2011
Total Award: \$20,000
27. **Nicholas M. Bernthal, M.D. (P.I.)**
Orthopaedic Research and Education Foundation (OREF) Resident Journal Club
“Improving Resident Journal Clubs”
Project Period: 07/01/2010-06/30/2011
Total Award: \$2,000
28. **Nicholas M. Bernthal, M.D. (P.I.)**
A.O. Educational Grants
“The Mechanical Strength of Different K-Wire Fixation Patterns in Supracondylar Humerus Fractures”
Project Period: 07/01/2010-06/30/2011
Total Award: \$5,000

Philanthropic Grants

1. **Nicholas M. Bernthal, M.D. (P.I.)**
Private Donor
“Orthopaedic Outreach to Soddo, Ethiopia”
Project Period: 07/01/2014-06/30/2018
Total Award: \$100,000
2. **Nicholas M. Bernthal, M.D. (Founder), Drops Fill Buckets Non-Profit**
Private Donors
Philanthropic NGO supporting health and education programs worldwide
Project Period: 07/01/2010-present
Total Award: \$500,000

REVIEWED GRANTS EXPECTING FUNDING

Grants Under Review

1. **Nicholas M. Bernthal, M.D. (P.I.)**
TRELLIS Biosciences
“Treatment of Orthopaedic Biofilm Infection with Therapeutic Antibody”
Total Award: \$960,000
2. **Nicholas M. Bernthal, M.D. (P.I.)**
Department of Defense Orthopaedic Program Grant
“Modified Antimicrobial Coatings to Protect Soldiers in Battle”
Total Award: \$750,000
Invited for Full Proposal

3. **Nicholas M. Bernthal, M.D. (Co-P.I.),** Jeff Miller (P.I.)
 Department of Defense Topic Area Grant
 “Subverting Bacterial Resistance”
 Total Award: \$10,000,000
Invited for Full Proposal
4. **Nicholas M. Bernthal, M.D. (P.I.)**
 Orthopaedic Research and Education Foundation Career Development Grant
 “Vitamin D Immunomodulation in Orthopaedic Surgery”
 Total Award: \$225,000
Invited for Full Proposal
5. **Nicholas M. Bernthal, M.D. (Co-investigator),** John Adams (P.I.)
 Department of Defense Orthopaedic Program Grant
 “Use of a Novel, Fast-Acting Vitamin D Therapeutic for Prevention, Accelerated Healing and
 Reduction of Implant-Associated Infections in Extremity Fractures”
 Total Award: \$4,500,000
Invited for Full Proposal
6. **Nicholas M. Bernthal, M.D. (Local P.I.)** (Ken Nelson, P.I.)
 Department of Defense Broad Agency Announcement
 “Identification of Pathogens in Failed Prosthetic Implants, Periprosthetic Tissue and Bone
 Specimens of Sonication, Culture, and Sequencing”
 Total Award: \$4,125,000
Invited for Full Proposal

LECTURES AND PRESENTATIONS

Editor’s Pick, Orthopaedic Research Society (ORS) selected manuscript, “The role of chairman and research director in influencing scholarly productivity and research funding in academic Orthopaedic Surgery” 2015.

Invited Speaker, Wilson Bost Interurban Orthopaedic Society, “Advances in Intraoperative Imaging to Address Implant Infection,” Santa Monica CA April 10, 2015.

Invited Speaker, World Federation of Hemophilia International Musculoskeletal Conference, “New Strategies to Prevent Implant Infections,” Belfast, United Kingdom, May 10, 2015.

Invited Speaker, Interurban Orthopaedic Society, “Addressing Surgical Infections: Modifying Implants, Antibiotics, and Hosts,” Los Angeles, CA, Oct 2, 2015.

Invited Speaker, Musculoskeletal Tumor Society Specialty Day, “Establishing an Orthopaedic Oncology Practice in the Era of the ACA,” Orlando, FL, March 5, 2016.

Invited Speaker, Pediatric Orthopaedic Society of North America Annual Meeting, Highlighted Researchers, Indianapolis, IN, April 28, 2016.

Invited Speaker, World Hemophilia Federation Annual Congress, Orlando, FL, July 25, 2016.

Invited Speaker, Grand Rounds, University of California, San Francisco (UCSF), Department of Orthopaedic Surgery, October 19, 2016.

Invited Speaker, Grand Rounds, Mayo Clinic (Arizona), Department of Orthopaedic Surgery, November 5, 2016.

Invited Speaker, Cancer Center Grand Rounds, Norris Cancer Center of USC, November 29, 2016.

Orthopaedic Research Society Spotlight Session, “The Infected Implant”, Keynote Speaker, 2017.

Invited Speaker, UCLA Department of Orthopaedic Surgery, December 6, 2017.

Invited Speaker, Jonsson Comprehensive Cancer Center Board Meeting, December 7, 2017.

Invited Speaker, University of Connecticut Orthopaedic Forum, March 22, 2018.

Keynote Speaker, University of California, San Diego, OREF West Coast Research Competition, September 5, 2018.

Invited Speaker, California NanoSystems Institute, “Navigating the Scientific, Regulatory, and Adoption Challenges of Antimicrobial Implants”, November 28, 2018.

Invited Speaker, Bone and Soft Tissue Tumors Madrid Course, “To Cement or Not to Cement: Fixation of Endoprostheses into Bone, February 7, 2019. “Infections in Megaprotheses Surgery. Past, Present and Future”, February 8, 2019.

Invited Speaker, California Orthopaedic Association (COA) 2019 Annual Meeting “Biofilm, Persists and Beyond”, May 17, 2019.

Invited Speaker, Grand Rounds, University of Dartmouth, Department of Orthopaedic Surgery, “Bone Sarcomas in the Growing Child: Challenges, Advances and Implications”, June 20, 2019.

Invited Speaker, Cancer Center Grand Rounds, Norris Cotton Cancer Center, Dartmouth-Hitchcock, Department of Orthopaedic Surgery, June 21, 2019.

Invited Speaker, Massachusetts General Hospital, Department of Orthopaedic Surgery Ground Rounds, “Beyond Sticks and Cement: Leveraging Basic Science to Improve Orthopaedic Outcomes.” May 30, 2019.

Keynote Speaker, Japanese Orthopaedic Association, Annual Meeting, Saitama, Japan, July 11, 2019.

Invited Moderator, CTOS 2019 Annual Meeting, Tokyo, Japan, November 16, 2019.

PUBLICATIONS/BIBLIOGRAPHY

A. Research Papers – Peer Reviewed and Publications

1. Federman N, **Bernthal N**, Eilber FC, Tap WD. The Multidisciplinary Management of Osteosarcoma. *Curr Treat Options Oncol*. 2009 Apr;10(1-2):82-93. doi: 10.1007/s11864-009-0087-3. Epub 2009 Feb 24. PMID: 19238553.
2. **Bernthal NM**, Gamradt SC, Kay RM, Wren TA, Cuomo AV, Reid J, Bales J, Otsuka NY. Static and Dynamic Gait Parameters Before and After Multilevel Soft Tissue Surgery in Ambulating Children with Cerebral Palsy. *J Pediatr Orthop*. 2010 Mar;30(2):174-9. doi: 10.1097/BPO.0b013e3181d04fb5. PMID: 20179566.

3. **Bernthal NM**, Stavrakis AI, Billi F, Cho JS, Kremen TJ, Simon SI, Cheung AL, Finerman GA, Lieberman JR, Adams JS, Miller LS. A Mouse Model of Post-Arthroplasty Staphylococcus Aureus Joint Infection to Evaluate In Vivo the Efficacy of Antimicrobial Implant Coatings. *PLoS One*. 2010 Sep 7;5(9):e12580. doi: 10.1371/journal.pone.0012580. PMID: 20830204.
4. **Bernthal NM**, Schwartz AJ, Oakes DA, Kabo JM, Eckardt JJ. How long do endoprosthesis reconstructions for proximal femoral tumors last? *Clin Orthop Relat Res*. 2010 Nov;468(11):2867-74. doi: 10.1007/s11999-010-1369-6. PMID: 20440661.
5. **Bernthal NM**, Seeger LL, Motamedi K, Stavrakis AI, Kremen TJ, McAllister DR, Motamedi AR. Can the Reparability of Meniscal Tears be Predicted with Magnetic Resonance Imaging? *Am J Sports Med*. 2011 Mar;39(3):506-10. doi: 10.1177/0363546510387507. PMID: 21173193.
6. **Bernthal NM**, Hoshino CM, Dichter D, Wong M, Silva M. Recovery of Elbow Motion Following Pediatric Lateral Condylar Fractures of the Humerus. *J Bone Joint Surg Am*. 2011 May 4;93(9):871-7. doi: 10.2106/JBJS.J.00935. PMID: 21543677.
7. Silva M, Wong TC, **Bernthal NM**. Outcomes of Reduction More Than 7 Days After Injury in Supracondylar Humeral Fractures in Children. *J Pediatr Orthop*. 2011 Oct-Nov;31(7):751-6. doi: 10.1097/BPO.0b013e31822f16e5. PMID: 21926872.
8. **Bernthal NM**, Pribaz JR, Stavrakis AI, Billi F, Cho JS, Ramos RI, Francis KP, Iwakura Y, Miller LS. Protective Role of IL-1 β Against Post-Arthroplasty Staphylococcus Aureus Infection. *J Orthop Res*. 2011 Oct;29(10):1621-6. doi: 10.1002/jor.21414. PMID: 21445990.
9. Kremen TJ Jr, **Bernthal NM**, Eckardt MA, Eckardt JJ. Giant Cell Tumor of Bone: Are We Stratifying Results Appropriately? *Clin Orthop Relat Res*. 2012 Mar;470(3):677-83. doi: 10.1007/s11999-011-2172-8. PMID: 22125240.
10. Pribaz JR, **Bernthal NM**, Billi F, Cho JS, Ramos RI, Guo Y, Cheung AL, Francis KP, Miller LS. Mouse Model of Chronic Post-Arthroplasty Infection: Noninvasive In Vivo Bioluminescence Imaging to Monitor Bacterial Burden for Long-Term Study. *J Orthop Res*. 2012 Mar;30(3):335-40. doi: 10.1002/jor.21519. PMID: 21837686.
11. **Bernthal NM**, Celestre PC, Stavrakis AI, Ludington JC, Oakes DA. Disappointing Short-Term Results with the DePuy ASR XL Metal-on-Metal Total Hip Arthroplasty. *J Arthroplasty*. 2012 Apr;27(4):539-44. doi: 10.1016/j.arth.2011.08.022. PMID: 22000575.
12. Pribaz JR, **Bernthal NM**, Wong TC, Silva M. Lateral Spurring (Overgrowth) After Pediatric Lateral Condyle Fractures. *J Pediatr Orthop*. 2012 Jul-Aug;32(5):456-60. doi: 10.1097/BPO.0b013e318259ff63. PMID: 22706459.
13. Niska JA, Meganck JA, Pribaz JR, Shahbazian JH, Lim E, Zhang N, Rice BW, Akin A, Ramos RI, **Bernthal NM**, Francis KP, Miller LS. Monitoring Bacterial Burden, Inflammation and Bone Damage Longitudinally Using Optical and μ CT Imaging in an Orthopaedic Implant Infection in Mice. *PLoS One*. 2012;7(10):e47397. doi: 10.1371/journal.pone.0047397. Epub 2012 Oct 17. PMID: 23082163.

14. **Bernthal NM**, Federman N, Eilber FR, Nelson SD, Eckardt JJ, Eilber FC, Tap WD. Long-Term Results (>25 years) of a Randomized, Prospective Clinical Trial Evaluating Chemotherapy in Patients with High-Grade, Operable Osteosarcoma. *Cancer*. 2012 Dec 1;118(23):5888-93. doi: 10.1002/cncr.27651. PMID: 22648705.
15. Monument MJ, **Bernthal NM**, Randall RL. Salient Features of Mesenchymal Stem Cells-Implications for Ewing Sarcoma Modeling. *Front Oncol*. 2013 Feb 25;3:24. doi: 10.3389/fonc.2013.00024. eCollection 2013. PMID: 23443465.
16. Silva M, Knutsen AR, Kalma JJ, Borkowski SL, **Bernthal NM**, Spencer HT, Sangiorgio SN, Ebrahimzadeh E. Biomechanical Testing of Pin Configurations in Supracondylar Humeral Fractures: The Effect of Medial Column Comminution. *J Orthop Trauma*. 2013 May;27(5):275-80. doi: 10.1097/BOT.0b013e31826fc05e. PMID: 22932754.
17. **Bernthal NM**, Jones KB, Monument MJ, Liu T, Viskochil D, Randall RL. Lost in Translation: Ambiguity in Nerve Sheath Tumor Nomenclature and its Resultant Treatment Effect. *Cancers (Basel)*. 2013 May 8;5(2):519-28. doi: 10.3390/cancers5020519. PMID: 24216989.
18. Stavrakis AI, Niska JA, Loftin AH, Billi F, **Bernthal NM**. Understanding Infection: A Primer on Animal Models of Periprosthetic Joint Infection. *Scientific World Journal*. 2013 Sep 22;2013:925906. doi: 10.1155/2013/925906. eCollection 2013. PMID: 24174919.
19. Hartzell TL, Shahbazian JH, Pandey A, Girson LA, Rubinstein R, Bojovic B, **Bernthal N**, Azari KK, Benhaim P. Does the Gatekeeper Model Work in Hand Surgery? *Plast Reconstr Surg*. 2013 Sep;132(3):381e-6e. doi: 10.1097/PRS.0b013e31829acc74. PMID: 23985650.
20. Hartzell TL, Pandey A, Shahbazian JH, Girson LA, **Bernthal NM**, Benhaim P, Azari KK. Range of Motion Measurements in Hand Surgery: Should They be Used for Assessing Outcomes? *Ann Plast Surg*. 2013 Oct;71(4):355-60. doi: 10.1097/SAP.0b013e31824ca676. PMID: 23407249.
21. Niska JA, Shahbazian JH, Ramos RI, Francis KP, **Bernthal NM**, Miller LS. Vancomycin-Rifampin Combination Therapy Has Enhanced Efficacy Against an Experimental Staphylococcus Aureus Prosthetic Joint Infection. *Antimicrob Agents Chemother*. 2013 Oct;57(10):5080-6. doi: 10.1128/AAC.00702-13. PMID: 23917317.
22. Stavrakis AI, Niska JA, Shahbazian JH, Loftin AH, Ramos RI, Billi F, Francis KP, Otto M, **Bernthal NM**, Uslan DZ, Miller LS. Combination Prophylactic Therapy with Rifampin Increases Efficacy Against an Experimental Staphylococcus Epidermidis Subcutaneous Implant-Related Infection. *Antimicrob Agents Chemother*. 2014;58(4):2377-86. doi: 10.1128/AAC.01943-13. PMID: 24514089.
23. **Bernthal NM**, Monument MJ, Randall RL, Jones KB. Rotationplasty: Beauty is in the Eye of the Beholder. *Oper Tech Orthop*. 2014 Jun 1;24(2):103-110. PMID: 25414567.
24. **Bernthal NM**, Taylor BN, Meganck JA, Wang Y, Shahbazian JH, Niska JA, Francis KP, Miller LS. Combined In Vivo Optical and μ CT Imaging to Monitor Infection, Inflammation and Bone

- Anatomy in an Orthopaedic Implant Infection in Mice. *J Vis Exp*. 2014 Oct 16;(92):e51612. doi: 10.3791/51612. PMID: 25350287.
25. **Bernthal NM**, Putnam A, Jones KB, Viskochil D, Randall RL. The Effect of Surgical Margins on Outcomes for Low Grade MPNSTs and Atypical Neurofibroma. *J Surg Oncol*. 2014 Dec;110(7):813-6. doi: 10.1002/jso.23736. PMID: 25111615.
 26. Monument MJ, **Bernthal NM**, Bowles AJ, Jones KB, Randall RL. What Are the 5-year Survivorship Outcomes of Compressive Endoprosthetic Osseointegration Fixation of the Femur? *Clin Orthop Relat Res*. 2015 Mar;473(3):883-90. doi: 10.1007/s11999-014-3724-5. PMID: 24942962.
 27. **Bernthal NM**, Greenberg M, Heberer K, Eckardt JJ, Fowler EG. What Are the Functional Outcomes of Endoprosthetic Reconstructions After Tumor Resection? *Clin Orthop Relat Res*. 2015 Mar;473(3):812-9. doi: 10.1007/s11999-014-3655-1. PMID: 24777730.
 28. **Bernthal NM**, Mitchell S, Bales JG, Benhaim P, Silva M. Variation in Practice Habits in the Treatment of Pediatric Distal Radius Fractures. *J Pediatr Orthop B*. 2015 Sep;24(5):400-7. doi: 10.1097/BPB.0000000000000204. PMID: 26110219.
 29. Stavrakis AI, Patel AD, Burke ZD, Loftin AH, Dworsky EM, Silva M, **Bernthal NM**. The Role of Chairman and Research Director in Influencing Scholarly Productivity and Research Funding in Academic Orthopaedic Surgery. *J Orthop Res*. 2015 Oct;33(10):1407-11. doi: 10.1002/jor.22919. PMID: 25940983.
 30. Chandhanayingyong MC, **Bernthal NM**, Ungarreevittaya P, Nelson SD, Chawla SP, Singh AS. Ewing Sarcoma in a Patient with Cowden Syndrome. *J Natl Compr Canc Netw*. 2015 Nov;13(11):1310-4. PMID: 26553762.
 31. **Bernthal NM**, Price SL, Monument MJ, Wilkinson B, Jones KB, Randall RL. Outcomes of Modified Harrington Reconstructions for Nonprimary Periacetabular Tumors: An Effective and Inexpensive Technique. *Ann Surg Oncol*. 2015 Nov;22(12):3921-8. doi: 10.1245/s10434-015-4507-2. Epub 2015 Mar 17. Erratum in: *Ann Surg Oncol*. 2015 Dec;22 Suppl 3:S1612. PMID: 25777096.
 32. Chang L, Rao N, **Bernthal N**, Dry SM, James AW. An Unusual Karyotype in Leiomyoma: Case Report and Literature Review. *J Orthop*. 2015 Nov 2;12(Suppl 2):S251-4. doi: 10.1016/j.jor.2015.10.016. eCollection 2015 Dec. PMID: 27047231.
 33. **Bernthal NM**, Price SL, Monument MJ, Wilkinson B, Jones KB, Randall RL. Erratum To: Outcomes of Modified Harrington Reconstructions for Nonprimary Periacetabular Tumors: An Effective and Inexpensive Technique. *Ann Surg Oncol*. 2015 Dec;22 Suppl 3:S1612. doi: 10.1245/s10434-015-4543-y. PMID: 25851340.
 34. Stavrakis AI, Loftin AH, Lord EL, Hu Y, Manegold JE, Dworsky EM, Scaduto AA, **Bernthal NM**. Current Animal Models of Postoperative Spine Infection and Potential Future Advances.

Front Med (Lausanne). 2015;2:34. Published online 2015 May 26. Doi: 10.3389/fmed.2015.00034. PMID: 26131448. PMCID: PMC4469114.

35. Stavrakis AI, Zhu S, Hegde V, Loftin AH, Ashbaugh AG, Niska JA, Miller LS, Segura T, **Bernthal NM**. In Vivo Efficacy of a "Smart" Antimicrobial Implant Coating. *J Bone Joint Surg Am*. 2016 Jul 20;98(14):1183-9. doi: 10.2106/JBJS.15.01273. PMID: 27440566.
36. Shurell E, Singh AS, Crompton JG, Jensen S, Li Y, Dry S, Nelson S, Chmielowski B, **Bernthal N**, Federman N, Tumeh P, Eilber FC. Characterizing the Immune Microenvironment of Malignant Peripheral Nerve Sheath Tumor by PD-L1 Expression and Presence of CD8+ Tumor Infiltrating Lymphocytes. *Oncotarget*. 2016 Sep 27;7(39):64300-64308. doi: 10.18632/oncotarget.11734. PMID: 27588404.
37. Shurell E, Vergara-Lluri ME, Li Y, Crompton JG, Singh A, **Bernthal N**, Wu H, Eilber FC, Dry SM. Comprehensive Adipocytic and Neurogenic Tissue Microarray Analysis of NY-ESO-1 Expression - A Promising Immunotherapy Target in Malignant Peripheral Nerve Sheath Tumor and Liposarcoma. *Oncotarget*. 2016 Nov 8;7(45):72860-72867. doi: 10.18632/oncotarget.12096. PMID: 27655679.
38. Park HY, Yang SK, Sheppard WL, Hegde V, Zoller SD, Nelson SD, Federman N, **Bernthal NM**. Current Management of Aneurysmal Bone Cysts. *Curr Rev Musculoskelet Med*. 2016 Dec;9(4):435-444. Review. PMID: 27778155.
39. Shen J, Meyers CA, Shrestha S, Singh A, LaChaud G, Nguyen V, Asatrian G, Federman N, **Bernthal N**, Eilber FC, Dry SM, Ting K, Soo C, James AW. Sclerostin Expression in Skeletal Sarcomas. *Hum Pathol*. 2016 Dec;58:24-34. doi: 10.1016/j.humpath.2016.07.016. PMID: 27498059.
40. Dworsky EM, Hegde V, Loftin AH, Richman S, Hu Y, Lord E, Francis KP, Miller LS, Wang JC, Scaduto A, **Bernthal NM**. Novel In Vivo Mouse Model of Implant Related Spine Infection. *J Orthop Res*. 2017 Jan;35(1):193-199. doi: 10.1002/jor.23273. PMID: 27116085.
41. Kiyuna T, Murakami T, Tome Y, Igarashi K, Kawaguchi K, Russell T, Eckardt MA, Crompton J, Singh A, **Bernthal N**, Bukata S, Federman N, Kanaya F, Eilber FC, Hoffman RM. Labeling the Stroma of a Patient-Derived Orthotopic Xenograft (PDOX) Mouse Model of Undifferentiated Pleomorphic Soft-Tissue Sarcoma with Red Fluorescent Protein for Rapid Non-Invasive Imaging for Drug Screening. *J Cell Biochem*. 2017 Feb;118(2):361-365. doi: 10.1002/jcb.25643. PMID: 27357060.
42. Wang Y, Thompson JM, Ashbaugh AG, Khodakivskyi P, Budin G, Sinisi R, Heinmiller A, van Oosten M, van Dijl JM, van Dam GM, Francis KP, **Bernthal NM**, Dubikovskaya EA, Miller LS. Preclinical Evaluation of Photoacoustic Imaging as a Novel Noninvasive Approach to Detect an Orthopaedic Implant Infection. *J Am Acad Orthop Surg*. 2017 Feb;25 Suppl 1:S7-S12. doi: 10.5435/JAAOS-D-16-00630. PMID: 27941556.
43. Hu Y, Hegde V, Johansen D, Loftin AH, Dworsky E, Zoller SD, Park HY, Hamad CD, Nelson GE, Francis KP, Scaduto A, **Bernthal NM**. Combinatory Antibiotic Therapy Increases Rate of

Bacterial Kill But Not Final Outcome in a Novel Mouse Model of Staphylococcus Aureus Spinal Implant Infection. *PLoS One*. 2017 Feb 28;12(2):e0173019. doi: 10.1371/journal.pone.0173019. eCollection 2017. PMID: 28245229.

44. Arshi A, Sharim J, Park DY, Park HY, Yazdanshenas H, **Bernthal NM**, Shamie AN. Prognostic Determinants and Treatment Outcomes Analysis of Osteosarcoma and Ewing Sarcoma of the Spine. *Spine J*. 2017 May;17(5):645-655. doi: 10.1016/j.spinee.2016.11.002. PMID: 27856382.
45. Arshi A, Sharim J, Park DY, Park HY, **Bernthal NM**, Yazdanshenas H, Shamie AN. Chondrosarcoma of the Osseous Spine: An Analysis of Epidemiology, Patient Outcomes, and Prognostic Factors Using the SEER Registry From 1973 to 2012. *Spine (Phila Pa 1976)*. 2017 May 1;42(9):644-652. doi: 10.1097/BRS.0000000000001870. PMID: 28441682.
46. Rendon JS, Swinton M, **Bernthal N**, Boffano M, Damron T, Evaniew N, Ferguson P, Galli Serra M, Hettwer W, McKay P, Miller B, Nystrom L, Parizzia W, Schneider P, Spiguel A, Velez R, Weiss K, Zumarraga JP, Ghert M. Barriers and Facilitators Experienced in Collaborative Prospective Research in Orthopaedic Oncology. *Bone Joint Res*. 2017 May;6(5):307-314. Published online 2017 June 3. PMID: 28515060. PMCID: PMC5457637.
47. Russell TA, Eckardt MA, Murakami T, Elliott IA, Kawaguchi K, Kiyuna T, Igarashi K, Li Y, Crompton JG, Graham DS, Dry SM, **Bernthal N**, Yanagawa J, Kalbasi A, Federman N, Chmielowski B, Singh AS, Hoffman RM, Eilber FC. Clinical Factors That Affect the Establishment of Soft Tissue Sarcoma Patient-Derived Orthotopic Xenografts: A University of California, Los Angeles, Sarcoma Program Prospective Clinical Trial. *JCO Precis Oncol*. 2017. doi: 10.1200/PO.17.00071. PMID: 30613825.
48. Hegde V, Johansen D, Park HY, Zoller SD, Hamad C, **Bernthal NM**. The Relationship Between OREF Grants and Future NIH Funding Success. *J Bone Joint Surg Am*. 2017 Aug 6;99(16):e87. doi: 10.2106/JBJS.16.01278. PMID: 28816904.
49. Hegde V, Dworsky EM, Stavrakis AI, Loftin AH, Zoller SD, Park HY, Richman S, Johansen D, Hu Y, Taylor JA, Hamad CD, Chun RF, Xi W, Adams JS, **Bernthal NM**. Single-Dose, Preoperative Vitamin-D Supplementation Decreases Infection in a Mouse Model of Periprosthetic Joint Infection. *J Bone Joint Surg Am*. 2017 Oct 18;99(20):1737-1744. doi: 10.2106/JBJS.16.01598. PMID: 29040128.
50. Romero Pastrana F, Thompson JM, Heuker M, Hoekstra H, Dillen CA, Ortines RV, Ashbaugh AG, Pickett JE, Linszen MD, **Bernthal NM**, Francis KP, Buist G, van Oosten M, van Dam GM, Thorek DLJ, Miller LS, van Dijk JM. Noninvasive Optical and Nuclear Imaging of Staphylococcus-Specific Infection with a Human Monoclonal Antibody-Based Probe. *Virulence*. 2018 Jan 1;9(1):262-272. doi: 10.1080/21505594.2017.1403004. PMID: 29166841.
51. Crompton JG, Ogura K, **Bernthal NM**, Kawai A, Eilber FC. Local Control of Soft Tissue and Bone Sarcomas. *J Clin Oncol*. 2018 Jan 10;36(2):111-117. doi: 10.1200/JCO.2017.75.2717. PMID: 29220297.

52. Hegde V, Burke ZDC, Park HY, Zoller SD, Johansen D, Kelley BV, Levine B, Motamedi K, Federman NC, Seeger LL, Nelson SD, **Bernthal NM**. Is Core Needle Biopsy Reliable in Differentiating Between Aggressive Benign and Malignant Radiolucent Bone Tumors? *Clin Orthop Relat Res*. 2018 Mar;476(3):568-577. doi: 10.1007/s11999.0000000000000062. PMID: 29529643.
53. **Bernthal NM**. CORR Insights®: Quantitative Primary Tumor Indocyanine Green Measurements Predict Osteosarcoma Metastatic Lung Burden in a Mouse Model. *Clin Orthop Relat Res*. 2018 Mar;476(3):488-489. doi: 10.1007/s11999.0000000000000136. PMID: 29529629.
54. **Bernthal NM**, Hegde V, Zoller SD, Park HY, Ghodasra JH, Johansen D, Eilber F, Eilber FC, Chandhanayingyong C, Eckardt JJ. Long-Term Outcomes of Cement in Cement Technique for Revision Endoprosthesis Surgery. *J Surg Oncol*. 2018 Mar;117(3):443-450. doi: 10.1002/jso.24862. PMID: 29081066.
55. Braman JP, **Bernthal N**, Freedman B, Gofton W, Hsu J, Sheps D, Strauss E. I Am What I Am Because of Who We All Are: The 2017 American-British-Canadian Traveling Fellowship. *J Bone Joint Surg Am*. 2018 Mar 7;100(5):e28. doi: 10.2106/JBJS.17.00812. PMID: 29509624.
56. Buerba RA, Sheppard WL, Herndon KE, Gajewski N, Patel AD, Leong NL, **Bernthal NM**, SooHoo NF. Academic Influence and Its Relationship to Industry Payments in Orthopaedic Surgery. *J Bone Joint Surg Am*. 2018 May 2;100(9):e59. doi: 10.2106/JBJS.17.00838. PMID: 29715232.
57. Momcilovic M, Bailey ST, Lee JT, Fishbein MC, Braas D, Go J, Graeber TG, Parlati F, Demo S, Li R, Walser TC, Gricowski M, Shuman R, Ibarra J, Fridman D, Phelps ME, Badran K, St John M, **Bernthal NM**, Federman N, Yanagawa J, Dubinett SM, Sadeghi S, Christofk HR, Shackelford DB. The GSK3 Signaling Axis Regulates Adaptive Glutamine Metabolism in Lung Squamous Cell Carcinoma. *Cancer Cell*. 2018 May 14;33(5):905-921.e5. doi: 10.1016/j.ccell.2018.04.002. PMID: 29763624.
58. Park HY, Zoller SD, Sheppard WL, Hegde V, Smith RA, Borthwell RM, Clarkson SJ, Hamad CD, Proal JD, **Bernthal NM**. A Comparison of Defense and Plaintiff Expert Witnesses in Orthopaedic Surgery Malpractice Litigation. *J Bone Joint Surg Am*. 2018 Jun 6;100(11):e78. doi: 10.2106/JBJS.17.01146. PMID: 29870452.
59. Hegde V, Arshi A, Wang C, Buser Z, Wang JC, Jensen AR, Adams JS, Zeegen EN, **Bernthal NM**. Preoperative Vitamin D Deficiency is Associated with Higher Postoperative Complication Rates in Total Knee Arthroplasty. *Orthopedics*. 2018 Jul 1;41(4):e489-e495. doi: 10.3928/01477447-20180424-04. PMID: 29708568.
60. Giustini N, **Bernthal NM**, Bukata SV, Singh AS. Tenosynovial Giant Cell Tumor: Case Report of a Patient Effectively Treated with Pexidartinib (PLX3397) and Review of the Literature. *Clin Sarcoma Res*. 2018 Jul 10;8:14. doi: 10.1186/s13569-018-0101-2. eCollection 2018. PMID: 30002809.

61. Burke ZDC, Blumstein GW, Zoller SD, Park HY, **Bernthal NM**. Reconstructive Science in Orthopaedic Oncology. *Tech Orthop*. 2018 Sep;33(3):175-182. doi: 10.1097/BTO.0000000000000282. PMID: 30636842.
62. Jahr JS, Bergese SD, Sheth KR, **Bernthal NM**, Ho HS, Stoicea N, Apfel CC. Current Perspective on the Use of Opioids in Perioperative Medicine: An Evidence-Based Literature Review, National Survey of 70,000 Physicians and Multidisciplinary Clinical Appraisal. *Pain Med*. 2018 Sep 1;19(9):1710-1719. doi: 10.1093/pm/pnx191. PMID: 29025135.
63. Thompson JM, Miller RJ, Ashbaugh AG, Dillen CA, Pickett JE, Wang Y, Ortines RV, Sterling RS, Francis KP, **Bernthal NM**, Cohen TS, Tkaczyk C, Yu L, Stover CK, DiGiandomenico A, Sellman BR, Thorek DL, Miller LS. Mouse Model of Gram-Negative Prosthetic Joint Infection Reveals Therapeutic Targets. *JCI Insight*. 2018 Sep 6;3(17). pii: 121737. doi: 10.1172/jci.insight.121737. eCollection 2018 Sep 6. PMID: 30185667.
64. Ferguson GB, Van Handel B, Bay M, Fiziev P, Org T, Lee S, Shkhyan R, Banks NW, Scheinberg M, Wu L, Saitta B, Elphingstone J, Larson AN, Riestler SM, Pyle AD, **Bernthal NM**, Mikkola HK, Ernst J, van Wijnen AJ, Bonaguidi M, Evseenko D. Mapping Molecular Landmarks of Human Skeletal Ontogeny and Pluripotent Stem Cell-Derived Articular Chondrocytes. *Nat Commun*. 2018 Sep 7;9(1):3634. Nat Commun. doi: 10.1038/s41467-018-05573-y. PMID: 30194383.
65. Hegde V, Park HY, Dworsky E, Zoller SD, Xi W, Johansen DO, Loftin AH, Hamad CD, Segura T, **Bernthal NM**. The Use of a Novel Antimicrobial Implant Coating in Vivo to Prevent Spinal Implant Infection. *Spine (Phila Pa 1976)*. 2018 Oct 7. doi: 10.1097/BRS.00000000000003279. PMID: 31593059.
66. Anderson LA, **Bernthal NM**, Haller JM, Higgins TF, Elliott IS, Anderson DR. Partnership in Ethiopia: University of Utah's and UCLA's Departments of Orthopaedics Collaboration with Soddo Christian Hospital in Ethiopia. *J Orthop Trauma*. 2018 Oct;32 Suppl 7:S12-S15. doi: 10.1097/BOT.0000000000001295. PMID: 30247392.
67. Pennington JD, Eilber FC, Eilber FR, Singh AS, Reed JP, Chmielowski B, Eckardt JJ, Bukata SV, **Bernthal NM**, Federman N, Nelson SD, Dry SM, Wang PC, Luu M, Selch MT, Steinberg ML, Kalbasi A, Kamrava M. Long-Term Outcomes with Ifosfamide-Based Hypofractionated Preoperative Chemoradiotherapy for Extremity Soft Tissue Sarcomas. *Am J Clin Oncol*. 2018 Dec;41(12):1154-1161. doi: 10.1097/COC.0000000000000443. PMID: 29664796.
68. Gastelum G, Chang EY, Shackelford D, **Bernthal N**, Kraut J, Francis K, Smutko V, Frost P. Multimodal Bioluminescent and Positronic-Emission Tomography/Computational Tomography Imaging of Multiple Myeloma Bone Marrow Xenografts in NOG Mice. *J Vis Exp*. 2019 Jan 7:143. doi: 10.3791/58056. PMID: 30663654.
69. Zoller SD, Park HY, Olafsen T, Zamilpa C, Burke ZDC, Blumstein G, Sheppard WL, Hamad CD, Hori KR, Tseng JC, Czupryna J, McMannus C, Lee JT, Bispo M, Romero Pastrana F, Raineri EJM, Miller JF, Miller LS, Maarten van Dijk J, Francis KP, **Bernthal NM**. Multimodal Imaging Guides Surgical Management in a Preclinical Spinal Implant Infection Model. *JCI*

Insight. 2019 Feb 7;4(3):e124813. Published online 2019 Feb 7. doi: 10.1172/jci.insight.124813. PMID: 30728332. PMCID: PMC6413782.

70. Namavar AA, Loftin AH, Khahera AS, Stavrakis AI, Hegde V, Johansen D, Zoller S, **Bernthal N**. Evaluation of US Orthopaedic Surgery Academic Centers Based on Measurements of Academic Achievement. *J Am Acad Orthop Surg*. 2019 Feb 1;27(3):e118-e126. doi: 10.5435/JAAOS-D-16-00536. PMID: 30199475.
71. Shurell-Linehan E, DiPardo BJ, Elliott IA, Graham DS, Eckardt MA, Dry SM, Nelson SD, Singh AS, Kalbasi A, Federman N, **Bernthal NM**, Eilber FC. Pathologic Response to Neoadjuvant Therapy is Associated with Improved Long-Term Survival in High-Risk Primary Localized Malignant Peripheral Nerve Sheath Tumors. *Am J Clin Oncol*. 2019 May;42(5):426-431. doi: 10.1097/COC.0000000000000536. PMID: 30913092.
72. **Bernthal NM**, Upfill-Brown A, Burke ZDC, Ishmael CR, Hsiue P, Hori K, Hornicek F, Eckardt JJ. Long-Term Follow-Up of Custom Cross-Pin Fixation of 56 Tumour Endoprosthesis Stems: A Single-Institution Experience. *Bone Joint J*. 2019 Jun;101-B(6):724-731. doi: 10.1302/0301-620X.101B6.BJJ-2018-0993.R1. PMID: 31154850.
73. Upfill-Brown A, Bukata S, **Bernthal NM**, Felsenfeld AL, Nelson SD, Singh A, Wesseling-Perry K, Eilber FC, Federman NC. Use of Denosumab in Children with Osteoclast Bone Dysplasias: Report of Three Cases. *JBMR Plus*. 2019 Aug 22;3(10):e10210. doi: 10.1002/jbm4.10210. eCollection 2019 Oct. PMID: 31687646.
74. **Bernthal NM**, Park HY, Zoller SD, Petrigliano FA. Implant Engineering in the Age of Biologics. *J Am Acad Orthop Surg*. 2019 Aug 1;27(15):e685-e690. doi: 10.5435/JAAOS-D-17-00503. PMID: 31107686.
75. Graham DS, Russell TA, Eckardt MA, Motamedi K, Seeger LL, Singh AS, **Bernthal NM**, Kalbasi A, Dry SM, Nelson SD, Elashoff D, Levine BD, Eilber FC. Oncologic Accuracy of Image-Guided Percutaneous Core-Needle Biopsy of Peripheral Nerve Sheath Tumors at a High-Volume Sarcoma Center. *Am J Clin Oncol*. 2019 Oct;42(10):739-743. doi: 10.1097/COC.0000000000000591. PMID: 31436746.
76. Miller RJ, Crosby HA, Schilcher K, Wang Y, Ortines RV, Mazhar M, Dikeman DA, Pinsker BL, Brown ID, Joyce DP, Zhang J, Archer NK, Liu H, Alphonse MP, Czupryna J, Anderson WR, **Bernthal NM**, Fortuno-Miranda L, Bulte JWM, Francis KP, Horswill AR, Miller LS. Development of a Staphylococcus Aureus Reporter Strain with Click Beetle Red Luciferase for Enhanced in Vivo Imaging of Experimental Bacteremia and Mixed Infections. *Sci Rep*. 2019 Nov 13;9(1):16663. doi: 10.1038/s41598-019-52982-0. PMID: 31723175.
77. Park HY, Hedge V, Zoller SD, Sheppard W, Hamad C, Smith RA, Sprague MM, Proal JD, Hoang J, Loftin A, Blumstein G, Burke Z, Cevallos N, Scaduto AA, **Bernthal NM**. Progress Not Panacea: Vancomycin Powder Efficacy and Dose Evaluated in an In Vivo Mouse Model of Spine Implant Infection. *Spine J*. 2019 Dec 19. pii: S1529-9430(19)31145-3. doi: 10.1016/j.spinee.2019.12.007. PMID: 31863932.

78. Ishmael CR, Hsiue PP, Zoller SD, Wang P, Hori KR, Gatto JD, Li R, Jeffcoat DM, Johnson EE, **Bernthal NM**. An Early Look at Operative Orthopaedic Injuries Associated with Electric Scooter Accidents: Bringing High-Energy Trauma to a Wider Audience. *J Bone Joint Surg Am*. 2019 Dec 30. doi: 10.2106/JBJS.19.00390. PMID: 31895168.
79. Stavrakis A.I., Zhu S., Loftin A.H., Weixian X., Niska J., Hegde V., Segura T., **Bernthal N.M.** Controlled Release of Vancomycin and Tigecycline from an Orthopaedic Implant Coating Prevents *Staphylococcus Aureus* Infection in an Open Fracture Animal Model. *Biomed Res. Intl.*, 2019; 2019: 1638508. Published online 2019 Dec 12. doi: 10.1155/2019/1638508. PMID: 31915682. PMCID: PMC6930786.
80. Trikha R, Keswani A, Ishmael CR, Greig D, Kelley BV, **Bernthal NM**. Current Trends in Orthopaedic Surgery Residency Applications and Match Rates. *J Bone Joint Surg Am*. 2020 Jan 6. doi: 10.2106/JBJS.19.00930. PMID: 31904608.
81. Heng M, Gupta A, Chung PW, Healey JH, Vaynrub M, Rose PS, Houdek MT, Lin PP, Bishop AJ, Hornicek FJ, Chen YL, Lozano-Calderon S, Holt GE, Han I, Biau D, Niu X, **Bernthal NM**, Ferguson PC, Wunder JS, Japanese Musculoskeletal Oncology Group (JMOG), Soft Tissue Osteosarcoma International Collaborative (STOIC). The Role of Chemotherapy and Radiotherapy in Localized Extraskeletal Osteosarcoma. *Eur J Cancer*. 2020 Jan; 125:130-141. doi: 10.1016/j.ejca.2019.07.029. PMID: 31806415.
82. Blumstein G, Zukotynski B, Cevallos N, Ishmael C, Zoller S, Burke Z, Clarkson S, Park H, **Bernthal N**, SooHoo NF. Randomized Trial of a Virtual Reality Tool to Teach Surgical Technique for Tibial Shaft Fracture Intramedullary Nailing. *J. Surg Educ*. 2020 Feb 5. doi: 10.1016/j.jsurg.2020.01.002 [Epub ahead of print]. PMID: 32035854.
83. Sheppard WL, Mosich GM, Smith RA, Hamad CD, Park HY, Zoller SD, Trikha R, McCoy TK, Borthwell R, Hoang J, Truong N, Cevallos N, Clarkson S, Hori KR, van Dijk JM, Francis KP, Petrigliano FA, **Bernthal NM**. Novel In Vivo Mouse Model of Shoulder Implant Infection. *J Shoulder Elbow Surg*. 2020 Jan 31. doi: 10.1016/j.jse.2019.10.032 [Epub ahead of print]. PMID: 32014357.
84. **Bernthal NM**, Burke ZDC, Hegde V, Upfill-Brown A, Chen CJ, Hwang R, Eckardt JJ. Long-Term Follow-Up of All-Polyethylene Tibial Components When Used for Oncological Endoprosthetic Reconstruction. *Bone Joint J*. 2020 Feb;102-B(2):170-176. doi: 10.1302/0301-620X.102B2. BJJ-2019-0535. R1. PMID: 320009432.
85. Arshi A, Shieh A, Adams JS, **Bernthal NM**, Zeegen EN, Sassoon AA. Preoperative Vitamin D Repletion in Total Knee Arthroplasty: A Cost-Effectiveness Model. *J. Arthroplasty*. 2019 Dec 27. pii: S0883-5403(19)31186-6. doi: 10.1016/j.arth.2019.12.037. [Epub ahead of print]. PMID: 31983566.
86. Blumstein Gideon, Zukotynski Brian, Cevallos Nicolas, Ishmael Chad, Zoller Steven, Burke Zach, Clarkson Samuelson, Park Howard, **Bernthal Nicholas**, Soohoo Nelson F. Randomized Trial of a Virtual Reality Tool to Teach Surgical Technique for Tibial Shaft Fracture

Intramedullary Nailing. *Surg Educ*. 2020 Feb [online ahead of print]. PMID: 32035854. doi: 10.1016/j.jsurg.2020.01.002.

87. Kalbasi A, Kamrava M, Chu FI, Telesca D, Van Dams R, Yang Y, Ruan D, Nelson SD, Dry SM, Hernandez J, Chmielowski B, Singh AS, Bukata SV, **Bernthal NM**, Steinberg ML, Weidhaas JB, Eilber FC. A Phase II Trial of 5-Day Neoadjuvant Radiotherapy for Patients with High-Risk Primary Soft Tissue Sarcoma. *Clin Cancer Res*. 2020 Feb 13: doi:10.1158/1078-0432.CCR-19-3524. PMID: 32054730.
88. Hwang R, Park HY, Sheppard W, **Bernthal NM**. Delayed Diagnosis is the Primary Cause of Sarcoma Litigation: Analysis of Malpractice Claims in the United States. *Clin Orthop Relat Res*. 2020 Jun 2. Doi: 10.1097/CORR.0000000000001340. Online ahead of print. PMID: 32496320.
89. **Bernthal NM**, Ishmael CR, Burke ZDC. Management of Pigmented Villonodular Synovitis (PVNS): An Orthopedic Surgeon's Perspective. *Curr Oncol Rep*. 2020 Jun 4;22(6):63. doi: 10.1007/s11912-020-00926-7. PMID: 32494892.
90. Henderson ER, Keeney BJ, Husson EG, **Bernthal NM**, Ji T, Pala E, Funovics PT, Groundland JS, Lozano-Calderon S, Puchner S, Zoller SD, Ruggieri P, Windhager R, Guo W, Hornicek FJ, Douglas Letson G, Temple HT. Nonmechanical Revision Indications Portend Certain Limb-Salvage Failure Following Total Femoral Replacement. *J Bone Joint Surg Am*. 2020 May 25. doi: 10.2106/JBJS.19.01022. Online ahead of print. PMID: 32453111.

B. Research Papers – Peer Reviewed (In Press)

1. Arshi A, Shieh A, Adams JS, **Bernthal NM**, Zeegen EN, Sassoon AA. Preoperative Vitamin D Repletion in Total Knee Arthroplasty: A Preliminary Cost-Effectiveness Model. *J Anthro*. 2020. Accepted for publication 12.2019.

RESEARCH PAPERS (NON-PEER REVIEWED)

A. Research Papers – Non-Peer Reviewed

None

B. Research Papers – Non-Peer Reviewed (In Press)

None

C. Research Papers – Non-Peer Reviewed (Submitted)

None

BOOK CHAPTERS:

1. **Bernthal NM**, Monument MJ, Randall RL, Jones KB. Rotationplasty: Beauty is in the eye of the beholder. *Oper Tech Orthop*. Elsevier Press. New York, NY: 2014 Jun 1;24(2):103-110.
2. Hegde V, **Bernthal N**. Metastatic Disease to the Pelvis. *Metastatic Bone Disease*. Springer Press. 2015.
3. Federman N, Loftin A, **Bernthal N**. Questions to Ask Your Medical Oncology Colleagues. *Metastatic Bone Disease*. Springer Press. 2015.

4. Federman N., Van Dyne E., **Bernthal N.** Malignant Bone Tumors. *Lanzkowsky Manual of Pediatric Hematology and Oncology*. Elsevier Press. New York, NY: 2015.
5. **Bernthal NM**, Burke ZDC, Blumstein GW, Grieg D, Shah A. Musculoskeletal Tumors. *Skinner H. McMahon P. Current Diagnosis and Treatment in Orthopaedics*. November 2019.

Letters to the Editor

None

Reviews

None

Editorials

None

Papers in Preparation (Research Completed)

None

Abstracts

None

SCIENTIFIC & SCHOLARLY PRESENTATIONS

International Presentations

1. **Bernthal N**, Pribaz J, Watts H, Scaduto A. A Novel Surgical Technique for Reconstruction in Tibial Deficiency. Poster Presentation – Association of Children’s Prosthetic-Orthotic Clinics (ACPOC) Annual Meeting. Banff, Canada April 11, 2012.
2. Shurell E, Dry S, Li Y, Singh A, Federman N, Selch M, **Bernthal N**, Eckardt J, Eilber F, Eilber F. Neoadjuvant Therapy in Patients with Primary Localized Malignant Nerve Sheath Tumors. Podium Presentation – Connective Tissue Oncology Society (CTOS) Annual Meeting. Prague, Czech Republic, November 2012.
3. **Bernthal N**, Federman N, Eckardt J, Eilber F, Tap W. Early Pathologic Response to Neoadjuvant Therapy Predictive of Long-Term (>25 Year) Survival in Osteosarcoma. Podium Presentation – Connective Tissue Oncology Society (CTOS) Annual Meeting. Prague, Czech Republic, November 2012.
4. **Bernthal N**, Price S, Wilkinson B, Jones K, Randall R. Treatment of Metastatic Disease to the Acetabulum: Are We Really Getting Better? Podium Presentation – Canadian Orthopaedic Association (COA)/American Orthopaedic Association (AOA) Annual Meeting. Montreal, June 2013.
5. **Bernthal N**, Price S, Wilkinson B, Jones K, Randall R. Modified Harrington Acetabular Reconstruction in Patients with Metastatic Cancer: Outcomes of a Rational Surgical Approach in the Era of Cost Containment. Poster Presentation – International Society of Limb Salvage (ISOLS) Annual Meeting. Bologna, Italy, September 2013.
6. **Bernthal N**, Greenberg M, Heberer K, Bukata S, Cyran F, Eckardt J, Fowler E. Going Beyond the MSTs Score: Assessing Functional Outcomes in Endoprosthetic Reconstructions with Gait Analysis. Podium Presentation – International Society of Limb Salvage (ISOLS) Annual Meeting. Bologna, Italy, September 2013.
7. Hetwer W, **Bernthal N**. Optimal biologic reconstruction of pathologic fractures through benign lesions of the femoral neck: A comparison of two almost identical cases. Poster Presentation – Asia Pacific Musculoskeletal Tumor Society. Singapore, April 2016.

8. Burke Z, Hegde V, Zoller S, Johansen D, Kelley B, Federman N, Seeger L, Nelson S, **Bernthal N**. Core Needle Biopsy is a Safe and Effective Modality for the Diagnosis of Aneurysmal Bone Cysts” Poster Presentation – Connective Tissue Oncology Society (CTOS). Lisbon, November 2016.
9. Federman N, Akiyama R, Singh A, Dry S, **Bernthal N**, Eilber F, Bukata S, Denny C. PD-1, PD-L1 and CD8 expression in human Ewing sarcoma and osteosarcoma patient tumor samples suggests putative role for targeted checkpoint inhibition. Podium Presentation – Connective Tissue Oncology Society (CTOS). Lisbon, November 2016.
10. Heng M, Ueda, Healey J, Rose P, Ferguson P, Gupta A, Raza A, Holt G, Blau D, Niu X, **Bernthal N**, Mottard S, Davidson D, Turcotte R, Wunder J. The role of chemotherapy and radiation in soft tissue osteosarcoma. Poster Presentation – Connective Tissue Oncology Society (CTOS). Lisbon, November 2016.
11. Jonas S, Gross C, Kamrava M, Singh A, Goldstein J, **Bernthal N**, Eilber F, Gordon E, Chawla S, Federman N. Response to checkpoint inhibition in a pediatric patient with metastatic refractory chordoma. Poster Presentation – Connective Tissue Oncology Society (CTOS). Lisbon, November 2016.
12. Gross C, Singh A, Chmielowski B, Eilber F, **Bernthal N**, Bukata S, Seeger L, Nelson S, Kamrava M, Federman N. Use of hydroxyurea in children, adolescents, and adults with recurrent and/or refractory aggressive fibromatosis. Poster Presentation – Connective Tissue Oncology Society (CTOS). Lisbon, November 2016.
13. Kiyuna T, Murakami T, Tome Y, Igarashi K, Kawaguchi K, Russell T, Eckardt M, Crompton J, Singh A, **Bernthal N**, Bukata S, Federman N, Kanaya F, Eilber F, Hoffman R. A whole-body imageable patient-derived orthotopic xenograft (PDOX) mouse model of undifferentiated pleomorphic soft-tissue sarcoma for rapid drug screening of individual patient tumors. Poster Presentation – Connective Tissue Oncology Society (CTOS). Lisbon, November 2016.
14. Russell T, Motamedi K, Seeger L, Singh A, Chmielowski B, **Bernthal N**, Bukata S, Crompton K, Nelson S, Dry S, Eilber F, Eilber FC, Levine B. Accuracy of image-guided percutaneous core needle biopsy of peripheral nerve sheath tumors. Poster Presentation – Connective Tissue Oncology Society (CTOS). Lisbon, November 2016.
15. Swinton M, Zumarraga J, Parizzia W, Boffano M, Hettwer W, **Bernthal N**, Weiss K, Damron T, Galli Sera M, Ferguson P, Spiguel A, Miller B, Nystrom L, Velez R, Ghert M. A qualitative study to determine barriers and facilitators encountered in collaborative prospective research in orthopaedic oncology. Poster Presentation – Connective Tissue Oncology Society (CTOS). Lisbon, November 2016.
16. **Bernthal N**, Zoller S, Hegde V, Chadhanayingyong C, Eilber FC, Eilber FR, Eckardt J. Cement in Cement Technique for Revision Endoprostheses. Poster Presentation – Connective Tissue Oncology Society (CTOS). Lisbon, November 2016.
17. **Bernthal N**. Entourage: The Lowly Life of an Orthopaedic Oncologist in Hollywood. Podium presentation – Academic Day at University College London Hospital. London, April 2017.
18. **Bernthal N**. Preventing Implant Infection. Podium presentation – National Orthopaedic Hospital at Stanmore. London, April 2017.

19. **Bernthal N.** Personalized Medicine in Sarcoma Care. Podium presentation – Oxford University. Oxford, April 2017.
20. **Bernthal N.** Addressing Arthroplasty Infection: Past, Present, and Future. Podium presentation – Cambridge University. Cambridge, May 2017.
21. **Bernthal N.** Vitamin D Host Immunomodulation to Prevent Surgical Infections. Podium presentation – Edinburgh University. Edinburgh, May 2017.
22. **Bernthal N.** Orthopaedic Oncology: Personalized Medicine and the Wild West. Podium presentation – Wrightington Gold Medal Research Day. Wrightington, England, May 2017.
23. **Bernthal N.** Seasonal Variation in Arthroplasty Infections. Podium presentation – Northumbria Academic Day. Manchester, England, May 2017.
24. **Bernthal N.** Personalized Medicine in Sarcoma Care. Podium presentation – University of Witswatersrand Academic Day. Johannesburg, May 2017.
25. **Bernthal N.** Preventing Implant Infections. Podium presentation – University of Pretoria Academic Day. Pretoria, May 2017.
26. **Bernthal N.** Personalized Medicine in Sarcoma Care. Podium presentation – Albert Lithuli Academic Day. Durban, South Africa, May 2017.
27. **Bernthal N.** Orthopaedic Oncology: Personalized Medicine and the Wild West. Podium presentation – Bloemfontein Research Day. Bloemfontein, South Africa, May 2017.
28. **Bernthal N.** Preventing Implant Infection. Podium presentation – Stellenbosch Academic Day. Stellenbosch, South Africa, May 2017.
29. **Bernthal N.** Personalized Medicine in Sarcoma Care. Podium presentation – University of Cape Town Academic Day. Cape Town, South Africa, May 2017.
30. Henderson E, Keeney B, **Bernthal N**, Zoller S, Pala E, Puchner S, Ji T, Funovics P, Groundland J, Lozano-Calderon S, Eckardt J, Guo W, Windhager R, Ruggieri P, Hornicek F, Letson D, Temple HT. Total Femoral Replacement: Descriptive reporting and analysis of limb salvage failures from seven tertiary centers. Podium Presentation – International Society of Limb Salvage (ISOLS). Japan, May 2017.
31. Yanagawa J, Federman N, Mapua M, Hong J, DiPardo B, Tomlinson J, Singh A, Kalbasi A, Hornicek F, Dry S, Nelson S, Eilber F, **Bernthal N**, Damoiseaux R, Sorangi A. High Throughput Drug Screening of Patient Derived Sarcoma Tumor Organoids for Personalized Therapy. Poster Presentation – Connective Tissue Oncology Society (CTOS). Rome, November 2018.
32. **Bernthal N**, Burke Z, Uphill-Brown A, Hornicek F, Eckardt J. Long Term Outcomes of Total Humeral Replacement for Primary Bone Tumors in 18 Patients. Poster Presentation – Connective Tissue Oncology Society (CTOS). Rome, November 2018.
33. **Bernthal N**, Burke Z, Uphill-Brown A, Hornicek F, Eckardt J. Long Term (>15 Year) Outcomes of Custom Cross-Pin Fixation of Tumor Endoprosthesis Stems. Poster Presentation – Connective Tissue Oncology Society (CTOS). Rome, November 2018.
34. Ishmael C, **Bernthal N**, Hsiue P, Zoller S, Wang P, Hori K. Early Look at Operative Orthopaedic Injuries Associated with Motorized Scooter Accidents – Bringing High-Energy Trauma to a Wider Audience. OTA Annual Meeting. Denver, CO, September 2019.

35. Bastida JL, Ye X, Laeis P, Fronk EM, Healey JH, Stacchiotti S, Palmerini E, Bauer S, **Bernthal NM**, Schreuder B, Leithner A, van de Sande M. Health-Related Quality of Life in Tenosynovial Giant Cell Tumor (TGCT) Patients in Europe and U.S.: An Observational Disease Registry. Poster Presentation – ISPOR Europe, Copenhagen, Denmark. November 2019.

National Presentations

1. **Bernthal N**, Schwartz A, Oakes D, Kabo M, Eilber F, Eilber F, Eckardt J. Long-Term Results Following Bipolar Proximal Femoral Reconstruction: The UCLA Experience 1982-2008. Poster Presentation – Combined Musculoskeletal Tumor Society (MSTS)/International Society of Limb Salvage (ISOLS) Meeting. Boston, September 2009.
2. Tap W, Dering J, Ginther C, Wai D, Plaisier S, Dry S, **Bernthal N**, Clarke K, Tung C, Desai A, Bajaj S, Wu H, Graeber T, Calzone F, Triche T, Slamon D, Eilber F. EWS:ERG Predicts Response and PTEN Loss Predicts Resistance to Selective IGF1R Inhibition in Ewing’s Sarcoma. Podium Presentation -- Connective Tissue Oncology Society (CTOS) Annual Meeting. Miami, November 2009.
3. **Bernthal N**, Stavrakis A, Celestre P, Ludington J, Oakes D. Large Head Metal on Metal Hip Arthroplasty with Monoblock Cup May Not Be as Good as Advertised. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. New Orleans, March 2010.
4. **Bernthal N**, Stavrakis A, Lieberman J, Garcia N, Kremen T, Oakes D, Finerman G, Miller L. A Novel Mouse Model of Post-Arthroplasty *Staphylococcus aureus* Infection: Real-Time *in vivo* Bioluminescence and Fluorescence Imaging to Longitudinally Track Infection. Podium Presentation – Orthopaedic Research Society (ORS) Annual Meeting. New Orleans, March 2010.
5. **Bernthal N**, Seeger L, Motamedi K, Stavrakis A, Kremen T, McAllister D, Motamedi A. Can the Reparability of Meniscal Tears be Predicted with Magnetic Resonance Imaging? Poster Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. New Orleans, March 2010.
6. Schwartz A, **Bernthal N**, Farnig E, Kabo M, Eilber F, Eckardt J. Long-Term Results Following 142 Endoprosthetic Reconstructions for Tumors of the Upper Extremity. Poster Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. New Orleans, March 2010.
7. Kremen T, **Bernthal N**, Eckardt M, Nelson S, Seeger L, Eckardt J. Long Term Results for Giant Cell Tumor of Bone. Podium Presentation – Musculoskeletal Tumor Society (MSTS) Annual Meeting. Philadelphia, September 2010.
8. Bales J, **Bernthal N**, Mitchell S, Benhaim P. Current Management Patterns of Pediatric Distal Radius Fractures. Podium Presentation – Annual Meeting of American Society for Surgery of the Hand. November 2010.

9. Kremen T, Reid J, Estrada K, **Bernthal N**, Lyons K. A Novel Murine Model of Delayed Long Bone Healing. Poster Presentation – Orthopaedic Research Society (ORS) Annual Meeting. Long Beach, January 2011.
10. **Bernthal NM**, Pribaz JR, Stavrakis AI, Billi F, Cho JS, Ramos RI, Francis KP, Iwakura Y, Miller LS. Protective role of IL-1b against post-arthroplasty *Staphylococcus aureus* infection. Podium Presentation – Orthopaedic Research Society (ORS) Annual Meeting. Long Beach, January 16, 2011.
11. **Bernthal N**, Pribaz J, Stavrakis A, Billi F, Francis K, Miller L. Mouse Model of Chronic Post-Arthroplasty *Staphylococcus aureus* Infection: Determination of the Optimal Bioluminescent Bacterial Strain for Long-Term Study. Poster Presentation – Orthopaedic Research Society (ORS) Annual Meeting. Long Beach, January 2011.
12. **Bernthal N**, Hoshino C, Dichter D, Wong M, Silva M. Prospective Longitudinal Evaluation of Elbow Range of Motion Following Pediatric Lateral Condyle Elbow Fractures. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. San Diego, February 16, 2011.
13. **Bernthal N**, Pribaz J, Stavrakis A, Billi F, Cho J, Francis K, Iwakura Y, Eckardt J, Miller L. Using Bioluminescence to Combat Biofilm: Mouse Modeling of Implant Infections to Protect Endoprosthetic Reconstructions. Podium Presentation – Combined Connective Tissue Oncology Society (CTOS)/ Musculoskeletal Tumor Society (MSTS) Annual Meeting. Chicago, October 2011.
14. **Bernthal N**, Eilber F, Eilber F, Eckardt J. Total Femoral Endoprostheses: The UCLA Experience 1980-2011. Podium Presentation – Combined Connective Tissue Oncology Society (CTOS)/ Musculoskeletal Tumor Society (MSTS) Annual Meeting. Chicago, October 2011.
15. **Bernthal N**, Pribaz J, Stavrakis A, Billi F, Cho J, Francis K, Iwakura Y, Miller L. Antimicrobial Coatings in a Total Joint Arthroplasty Model. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. San Francisco, 2012.
16. Monument M, **Bernthal N**, Jones K, Randall R. Compressive Endoprosthetic Osteointegration Fixation for Limb Salvage of the Extremity: Five-year follow up. Podium Presentation – Musculoskeletal Tumor Society (MSTS) Annual Meeting, San Francisco. October 2013.
17. Stavrakis A, Niska J, Loftin A, Billi F, **Bernthal N**. Making Endoprostheses Less Susceptible to Infection: An in vivo Assessment of the Antimicrobial Activity of Porous Tantalum. Podium Presentation - Musculoskeletal Tumor Society (MSTS) Annual Meeting. San Francisco, October 2013.
18. **Bernthal N**, Putnam A, Viskochil D, Jones J, Randall R. Should We Go Wide?: Outcomes of Positive Margin Surgery in Atypical Neurofibroma and Low-Grade MPNST. Poster Presentation – Musculoskeletal Tumor Society (MSTS) Annual Meeting. San Francisco, October 2013.

19. **Bernthal N**, Price S, Wilkinson B, Jones K, Randall R. Modified Harrington Acetabular Reconstruction in Patients with Metastatic Cancer: Outcomes of a Rational Surgical Approach in the Era of Cost Containment. Poster Presentation – Musculoskeletal Tumor Society (MSTS) Annual Meeting. San Francisco, October 2013.
20. **Bernthal N**, Putnam A, Viskochil D, Jones J, Randall R. How Do Surgical Margins Affect Survival in Atypical Neurofibroma and Low-Grade MPNST. Poster Presentation – Connective Tissue Oncology Society (CTOS) Annual Meeting. New York, November 2013.
21. **Bernthal N**, Putnam A, Viskochil D, Jones J, Randall R. How Do Surgical Margins Affect Survival in Atypical Neurofibroma and Low-Grade MPNST. Poster Presentation – Society of Surgical Oncology (SSO) Annual Meeting. Phoenix, 2014.
22. Monument M, **Bernthal N**, Bowles A, Jones K, Randall R. Compressive Endoprosthetic Osteointegration Fixation for Limb Salvage of the Extremity: Five-year follow up. Poster Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. New Orleans, 2014.
23. Niska J, Shahbazian J, Ramos R, Francis K, **Bernthal N**, Miller L. Vancomycin plus Rifampin Therapy has Enhanced Efficacy Against a Staphylococcus aureus Implant Infection. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. New Orleans, 2014.
24. Fowler E, **Bernthal N**, Greenberg M, Heberer K, Bukata S, Eckardt J. Gait Outcomes Post Lower Extremity Tumor Resection and Endoprosthetic Reconstruction. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. New Orleans, 2014.
25. **Bernthal N**, Price S, Wilkinson B, Jones K, Randall R. Acetabular Reconstructions for Metastatic Disease in the Era of Cost Containment. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. New Orleans, 2014.
26. Stavrakis A, Niska J, Loftin A, Miller L, Kwong L, Billi F, **Bernthal N**. An *in vivo* Assessment of the Bacterial Susceptibility of Porous Tanatalum. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. New Orleans, 2014.
27. **Bernthal NM**, Price, SL, Wilkinson B, Jones, KB, Randall RL. Acetabular Reconstruction for Metastatic Disease: Outcomes of a Rational Approach in the Era of Cost Containment. Association of Bone and Joint Surgeons 66th Annual Meeting. New York City, May 15, 2014, paper #10, p.92.
28. Stavrakis A, Patel A, Burke Z, Loftin A, Dworsky E, Silva M, **Bernthal N**. The Role of Chairman and Research Director in Influencing Scholarly Productivity and Research Funding in Academic Orthopaedic Surgery. Poster Presentation – Orthopaedic Research Society (ORS) Annual Meeting. Las Vegas, 2015.

29. Niska J, Shahbazian J, Ramos R, Francis K, **Bernthal N**. Antibiotic Implant Coatings Prevent Staphylococcus aureus Infection in an Open Fracture Animal Model. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. Las Vegas, 2015.
30. Stavrakis A, Loftin A, Dworsky E, Richman S, Billi F, **Bernthal N**. Assessment of a Novel Antibiotic Coating in Decreasing Periprosthetic Infection Using an in vivo Mouse Model. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. Las Vegas, 2015.
31. Stavrakis A, Patel A, Burke Z, Loftin A, Dworsky E, Silva M, **Bernthal N**. The Role of Chairman and Research Director in Influencing Scholarly Productivity and Research Funding in Academic Orthopaedic Surgery. Poster Presentation – American Orthopaedic Association (AOA). Rhode Island, 2015.
32. Chawla N, Bukata S, Sankhala K, Mendanha W, Narasimhan V, Menendez L, **Bernthal N**, Brien E, Chua V, Sudan M, Jabour B, Jafari O, Chawla S. Sustained Response of Complex Giant Cell Tumors with Denosumab: Single Center 8-year Experience. Poster Presentation – American Society of Clinical Oncology (ASCO) Annual Meeting. Chicago, May 2015.
33. **Bernthal N**, Chandhanayingyong C, Eilber F, Eilber F, Eckardt J. Results of Revision Cemented Endoprostheses. Poster Presentation – Combined Musculoskeletal Tumor Society (MSTS)/International Society of Limb Salvage (ISOLS) Meeting. Orlando, October 2015.
34. **Bernthal N**, Dworsky E, Stavrakis A, Loftin A, Hu Y, Richman S, Deshayes S, Kasko A, Wong G. Modifying Antibiotics to Provide Biofilm Penetration in the Treatment and Prevention of Endoprosthetic Infection. Poster Presentation – Combined Musculoskeletal Tumor Society (MSTS)/International Society of Limb Salvage (ISOLS) Meeting. Orlando, October 2015.
35. Dworsky E, Stavrakis A, Loftin A, Hu Y, Richman S, **Bernthal N**. Vitamin D: A Modifiable Risk Factor for Endoprosthetic Implant Infection. Poster Presentation – Combined Musculoskeletal Tumor Society (MSTS)/International Society of Limb Salvage (ISOLS) Meeting. Orlando, October 2015.
36. Gross J, Levine B, McNee M, Plotkin B, Motamedi K, Seeger L, **Bernthal N**. Bone and Soft Tissue “Tumor Mimickers”: It’s Not Always Neoplastic Disease! Poster Presentation – Combined Musculoskeletal Tumor Society (MSTS)/International Society of Limb Salvage (ISOLS) Meeting. Orlando, October 2015.
37. **Bernthal N**, Mendanha W, Nelson S, Sankhala K, Eckardt J, Chawla S. Is Radiation Worth the Risk for Diffuse Large B-Cell Lymphoma of Bone in the Era of R-CHOP Therapy? Podium Presentation – Combined Musculoskeletal Tumor Society (MSTS)/International Society of Limb Salvage (ISOLS) Meeting. Orlando, October 2015.
38. **Bernthal N**, Mendanha W, Nelson S, Sankhala K, Eckardt J, Chawla S. Is Radiation Worth the Risk for Diffuse Large B-Cell Lymphoma of Bone in the Era of R-CHOP Therapy? Podium Presentation – Combined Musculoskeletal Tumor Society (MSTS)/International Society of Limb Salvage (ISOLS) Meeting. Orlando, October 2015.

39. **Bernthal N**, Dworsky E, Richman S, Loftin A, Hu Y, Stavrakis A, Adams J. Vitamin D: A Modifiable Risk Factor for Our Immunocompromised Patients Undergoing Surgery. Poster Presentation – Connective Tissue Oncology Society (CTOS) Annual Meeting. Salt Lake City, November 2015.
40. Bukata S, Sudan M, Mendanha W, Chawla N, Sankhala K, Eckardt M, Menendez L, **Bernthal N**, Brien E, Emond R, Chua-Alcala V, Jabour B, Jafari O, Chawla S. Considerations for Long-Term Maintenance Treatment with Denosumab for Stable, Inoperable Giant Cell Tumor: Making a care for spacing of doses after initial response. Podium Presentation – Connective Tissue Oncology Society (CTOS) Annual Meeting. Salt Lake City, November 2015.
41. **Bernthal N**, Chandhanayingyong C, Eilber F, Eilber F, Eckardt J. Can We Revise Cemented Endoprostheses? Poster Presentation – Connective Tissue Oncology Society (CTOS) Annual Meeting. Salt Lake City, November 2015.
42. **Bernthal N**, Mendanha W, Sankhala K, Hu J, Leong B, Syed I, Richman S, Nelso S, Menendez L, Brien E, Chawla N, Eckardt M, Kim J, Chua-Alcala V, Chawla S. Is Radiation Worth the Risk for Diffuse Large B-Cell Lymphoma of Bone in the Era of R-CHOP Therapy? Poster Presentation – Connective Tissue Oncology Society (CTOS) Annual Meeting. Salt Lake City, November 2015.
43. Singh A, Shurell E, Jensen S, Dry S, Li Y, Chmielowski B, Federman N, **Bernthal N**, Tumeh P, Eilber FR, Eilber FC. Characterization of the Immune State of MPNST by PD-L1 and CD8 Expression. Poster Presentation – Connective Tissue Oncology Society (CTOS) Annual Meeting. Salt Lake City, November 2015.
44. Stavrakis A, Loftin A, Miller L, Richman S, Billi F, **Bernthal N**. A Smart Coating for Arthroplasty Implants – and in vivo Assessment. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. Orlando, 2016.
45. Dworsky E, Loftin A, Richman S, Scaduto A, **Bernthal N**. Antimicrobial Coatings for Spine Implants in a Novel Mouse Model of Spinal Fixation. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. Orlando, 2016.
46. **Bernthal N**. Advances in orthopaedic implant infection prevention and treatment. Podium Presentation – World Hemophilia Federation National Congress. Orlando, July 2016.
47. Zoller S, Hegde V, **Bernthal N**. Vitamin D deficiency increases bioluminescent bacterial burden and fluorescent neutrophil infiltration in an in vivo mouse model of periprosthetic joint infection. Podium Presentation – Musculoskeletal Infection Society (MSIS). Charlotte, August 2016.
48. Zoller S, Hegde V, **Bernthal N**. Effect of Vancomycin versus combination antibiotic therapy on spinal implant infection in an in vivo mouse model. Podium Presentation – Musculoskeletal Infection Society (MSIS). Charlotte, August 2016.

49. Hegde V, Loftin A, Francis K, **Bernthal N**. Vitamin D deficiency increases bioluminescent bacterial burden and fluorescent neutrophil infiltration in an *in vivo* mouse model of periprosthetic joint infection. Poster Presentation – World Molecular Imaging Congress. New York, September 2016.
50. Hegde V, Loftin A, Francis K, **Bernthal N**. Novel Preclinical Model of Implant Related Spine Infection Using Bioluminescent and Fluorescent Imaging. Podium Presentation – World Molecular Imaging Congress. New York, September 2016.
51. Burke Z, Hegde V, Zoller S, Johansen D, Kelley B, Federman N, Seeger L, Nelson S, **Bernthal N**. Core Needle Biopsy is a Safe and Effective Modality for the Diagnosis of Aneurysmal Bone Cysts” Poster Presentation – Musculoskeletal Tumor Society (MSTS) Annual Meeting. Detroit, 2016.
52. Heng M, Ueda, Healey J, Rose P, Ferguson P, Gupta A, Raza A, Holt G, Blau D, Niu X, **Bernthal N**, Mottard S, Davidson D, Turcotte R, Wunder J. The role of chemotherapy and radiation in soft tissue osteosarcoma. Podium Presentation – Musculoskeletal Tumor Society (MSTS) Annual Meeting. Detroit, 2016.
53. **Bernthal N**, Zoller S, Hegde V, Chadhanayingyong C, Eilber FC, Eilber FR, Eckardt J. Cement in Cement Technique for Revision Endoprostheses. Podium Presentation – Musculoskeletal Tumor Society (MSTS) Annual Meeting. Detroit, 2016. **Winner of Best Paper Presentation Award.**
54. Burke Z, Zoller S, Hegde V, Park H, Blumstein G, Sheppard W, Hamad C, Smith R, Loftin A, Johansen D, Nelson S, **Bernthal N**. "A Novel Mouse Model of Bulk Allograft Infection Demonstrates a Biphasic Peak in Infection Intensity." Podium Presentation – Musculoskeletal Infection Society (MSIS) Annual Meeting. Boston. August 4-5, 2017.
55. Burke Z, Zoller S, Park H, Hegde V, Blumstein G, Sheppard W, Hamad C, Smith R, Proal J, Clarkson S, Borthwell R, Nelson N, **Bernthal N**. "Bulk allograft is more susceptible to infection than is stainless steel or cancellous allograft using a novel mouse model of infection”. Podium Presentation – Musculoskeletal Infection Society (MSIS) Annual Meeting. Boston. August 4-5, 2017.
56. Burke Z, Sheppard W, Zoller S, Park H, Blumstein G, Hegde V, Hamad C, Smith R, Loftin A, Johansen D, Nelson S, **Bernthal N**. "Novel In Vivo Mouse Model of Shoulder Implant Infection and Osteomyelitis.” Podium Presentation – Musculoskeletal Infection Society (MSIS) Annual Meeting. Boston, August 4-5, 2017.
57. Blumstein G, Burke D, Park H, Zoller S, Hegde V, Sheppard W, Van Dijn J, Tseng J, Francis K, **Bernthal N**. Fluorescence Image-Guided Surgery with Staphylococcus aureus Specific Probes within a Mouse Model of Spine Implant Infection. Podium presentation – Musculoskeletal Infection Society (MSIS) Annual meeting. Boston, August 4-5, 2017.
58. Blumstein G, Burke D, Park H, Zoller S, Hegde V, Sheppard W, Hamad C, Scaduto T, **Bernthal N**. Efficacy and Dose Response of Vancomycin Powder within a Mouse Model of

Spinal Implant Infection. Podium presentation – Musculoskeletal Infection Society (MSIS) Annual meeting. Boston, August 4-5, 2017.

59. Park H, Xi W, Zhu S, Hegde V, Zoller S, Segura T, **Bernthal N**. “Smart” Polymer Coating Prevents Spinal Implant Infection in a Mouse Model of Spine Surgery. Podium Presentation – North American Spine Society (NASS) Annual Meeting. Orlando, October 2017.
60. Park H, Hegde V, Zoller S, Hamad C, Scaduto A, **Bernthal N**. Combination Antibiotic Therapy with Vancomycin and Rifampin within an In Vivo Mouse Model of Spine Implant Infection. Podium Presentation – North American Spine Society (NASS) Annual Meeting. Orlando, October 2017.
61. Park H, Sheppard W, Hegde V, Zoller S, Sprague M, Smith R, **Bernthal N**. Vancomycin Powder in Spine Surgery: Does it Work and Does Dose Matter? An In Vivo Mouse Model Experiment. Podium Presentation – North American Spine Society (NASS) Annual Meeting. Orlando, October 2017.
62. Arshi A, Sharim J, Park D, **Bernthal N**, Shamie A. Chondrosarcoma of the Osseous Spine: An Analysis of 974 Cases Using the SEER Registry. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. San Diego, 2017.
63. Zoller S, Eilber FC, Eilber FR, Eckardt J, **Bernthal N**. Cement in Cement Technique for Revision Endoprostheses. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. San Diego, 2017.
64. Hegde V, Dworsky E, Stavrakis A, Loftin A, Zoller S, Park H, **Bernthal N**. Combinatory Antibiotic Treatment for Spinal Implant Infection. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. San Diego, 2017.
65. Hegde V, Dworsky E, Stavrakis A, Loftin A, Zoller S, Park H, Richman S, Johansen D, Hu Y, Taylor J, Hamad C, Chun R, Xi W, Adams J, **Bernthal N**. Priming the Immune System for Surgery: Single-Dose Preoperative Vitamin D Supplementation Decreases Infection in an Animal Model of Periprosthetic Joint Infection. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. San Diego, 2017. **Winner of “Game Changer” Award.**
66. **Bernthal N**, Zoller S, Hegde V, Eilber FC, Eilber FR, Eckardt J. Long Term Results of All Polyethylene Tibias in Endoprosthetic Reconstructions. Podium Presentation – Musculoskeletal Tumor Society (MSTS) Annual Meeting. Denver, 2017.
67. Zoller S, Hegde V, Chadhanayingyong C, Eilber FC, Eilber FR, **Bernthal N**. Allograft Infections – Lessons from the Laboratory that Should Guide Clinical Decisions. Podium Presentation – Musculoskeletal Tumor Society (MSTS) Annual Meeting. Denver, 2017. **Winner of Best Paper Presentation Award.**

68. **Bernthal N**, Burke Z, Upfill-Brown A, Eckardt J. Long Term Outcomes of Total Humeral Replacement for Primary Bone Tumors in 18 Patients. Podium Presentation – Musculoskeletal Tumor Society (MSTS) Annual Meeting. New York, 2018.
69. **Bernthal N**, Burke Z, Upfill-Brown A, Eckardt J. Long Term (>15 Year) Outcomes of Custom Cross-Pin Fixation of Tumor Endoprosthesis Stems. Podium Presentation – Musculoskeletal Tumor Society (MSTS) Annual Meeting. New York, 2018.
70. Invited key note speaker Orthopaedic Research and Education Foundation’s (OREF) Regional Residents Research Day, San Diego, September 2018.
71. Burke ZDC, Zoller SD, Blumstein GW, Hori KR, Cevallos NA, Villalpando C, Truong N, Proal JD, **Bernthal NM**. Tobramycin-Loaded Poly (methylmethacrylate) Does Not Eradicate Infection and is Colonized by Bacteria in Mouse Model of Revision for Prosthetic Joint Infection. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. Las Vegas, March 2019.
72. Burke ZDC, Blumstein GW, Hori KR, Villalpando C, Zukotynski BK, Uweh SI, Stavrakis AI, **Bernthal NM**. Perioperative Zoledronic Acid Increases Bacterial Burden in a Validated Model of Implant Infection. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. Las Vegas, March 2019.
73. Burke ZDC, Xi W, **Bernthal NM**. Synthetic Networking of Low-Cost Polymeric Implant Coating Allows Sustained Release and Prevents Infection in Vivo. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. Las Vegas, March 2019.
74. Sheppard WL, Park H, Zoller SD, Hegde V, Burke ZDC, Blumstein GW, Hamad CD, **Bernthal NM**. Excising the Guesswork: Fluorescence-Guided Infection Debridement. Poster Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. Las Vegas, March 2019.
75. Park H, Hwang R, Bugarin A, Hamad CD, Proal JD, Sheppard WL, Smith R, Hornicek FJ, **Bernthal NM**. Analysis of Medical Malpractice Outcomes for Sarcoma Litigation in the United States. Podium Presentation – American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting. Las Vegas, March 2019.
76. **Bernthal, NM**. Invited Grand Rounds Speaker. Massachusetts General Hospital. "Beyond Sticks and Cement: Leveraging Basic Science to Improve Orthopaedic Outcomes". Boston, May 2019.
77. **Bernthal, NM**. Invited speaker. Dartmouth Hitchcock Medical Center. “Bone Sarcomas in the Growing Child: Challenges, Advances and Implications” Lebanon, June 2019.
78. **Bernthal, NM**. Invited speaker. Japanese Orthopaedic Association’s (JOA) 2019 Annual Meeting. Moving the Needle in Orthopaedic Oncology: Innovation & Advancement in an Apprenticeship Paradigm”. Tokyo, July 2019.
79. Patrick Lin, **Nicholas Bernthal**. Moderator for Research, Session VII, Musculoskeletal Tumor Society (MSTS) 2019 Annual Meeting. Portland, October 2019.

80. **Bernthal, NM.** Invited Session Chair for Connective Tissue Oncology Society (CTOS) 2019 Annual Meeting. Moderator for Oral Presentations, Session 2, “Novel Therapeutic Targets”. Tokyo, November 2019.

Regional Presentations

1. **Bernthal N,** Hoshino C, Dichter D, Wong M, Silva M. “Prospective Evaluation of Fractures of the Lateral Condyle of the Humerus in Pediatric Patients.” Podium Presentation – Western Orthopaedic Association Annual Meeting, Monterey CA, August 7, 2010.
2. **Bernthal N,** Pribaz J, Stavrakis A, Miller L. “Mouse Modeling of Implant Infection – Using Bioluminescence Against Biofilms.” Podium Presentation – California Orthopaedic Association Annual Meeting, Laguna Niguel, CA, May, 2011. Winner of the **OREF Award.**
3. **Bernthal N,** Pribaz J, Stavrakis A, Billi F, Cho J, Francis K, Iwakura Y, Miller L. “Protective role of IL-1b against post-arthroplasty *Staphylococcus aureus* infection.” Podium Presentation – Western Orthopaedic Association Annual Meeting, Honolulu, HI, July 30, 2011. **Winner of the Lloyd Taylor Award.**
4. Silva M, Wong T, **Bernthal N.** “Outcomes of Reduction More than Seven Days After Injury in Supracondylar Humerus Fractures in Children.” Podium Presentation – Western Orthopaedic Association Annual Meeting, Honolulu, HI, July 28, 2011.
5. **Bernthal N,** Pribaz J, Stavrakis A, Billi F, Cho J, Francis K, Iwakura Y, Miller L. “Using Bioluminescence to Monitor Biofilm: A Murine Model of Post-Arthroplasty Infection.” Podium Presentation – Western Orthopaedic Association Annual Meeting, Honolulu, HI, July 28, 2011.
6. **Bernthal N,** Pribaz J, Watts H, Scaduto A. A Novel Surgical Technique for Reconstruction in Tibial Deficiency. Poster Presentation – Western Orthopaedic Association Annual Meeting, Honolulu, HI, July 28, 2011.
7. Kremen T, Reid J, Estrada K, **Bernthal N,** Lyons K. “A Novel Murine Model of Delayed Long Bone Healing.” Podium Presentation – Western Orthopaedic Association Annual Meeting, Honolulu, HI, July 28, 2011.
8. **Bernthal N,** Ludington J, Gamradt S, Oakes D. “To Screen or Not to Screen: Results of Routine DVT Screening in Knee Arthroplasty Patients in the Era of Regional Anesthesia.” Poster Presentation – Western Orthopaedic Association Annual Meeting, Honolulu, HI, July 28, 2011.
9. Kremen T, **Bernthal N,** Eckardt M, Nelson S, Seeger L, Eckardt J. “Long Term Results for Giant Cell Tumor of Bone.” Podium Presentation – Western Orthopaedic Association Annual Meeting, Honolulu, HI, July 28, 2011.
10. Silva M, **Bernthal N,** Ebrahimzadeh E. “Supracondylar Humeral Fractures: Evaluation of Multiple Pin Configurations with Emphasis on Medial Column Comminution.” Poster Presentation – Western Orthopaedic Association Annual Meeting, Honolulu, HI, July 28, 2011.

11. Niska J, Pribaz J, **Bernthal N**, Miller L. “Systemic Antibiotics Preventing Post-Implant Infection.” Podium Presentation – OREF/ORS Pacific Coast Resident Research Symposium, Irvine, CA, June 15, 2012.
12. Kremen T, Reid J, Estrada K, **Bernthal N**, Lyons K. “A Novel Murine Model of Delayed Long Bone Healing.” Podium Presentation – OREF/ORS Pacific Coast Resident Research Symposium, Irvine, CA, June 15, 2012.
13. **Bernthal N**, Pribaz J, Niska J, Miller L. “Translational Targets of a Post-Arthroplasty Mouse Model of Infection: Coatings, Immunology and Metallurgy.” Podium Presentation – OREF/ORS Pacific Coast Resident Research Symposium, Irvine, CA, June 15, 2012. **Winner of First Place Prize.**
14. Niska J, Shahbazian J, Ramos R, Francis K, **Bernthal N**, Miller L. “Vancomycin plus Rifampin Therapy has Enhanced Efficacy Against a Staphylococcus aureus Implant Infection.” Podium Presentation – Western Orthopaedic Association (WOA) Annual Meeting, Maui, HI, July 2014.
15. **Bernthal N**, Putnam A, Viskochil D, Jones J, Randall R. “How Do Surgical Margins Affect Survival in Atypical Neurofibroma and Low-Grade MPNST?” Podium Presentation – Western Orthopaedic Association (WOA) Annual Meeting, Maui, HI, July 2014.
16. Stavrakis A, Loftin A, Dworsky E, Richman S, Billi F, **Bernthal N**. “Assessment of a Novel Antibiotic Coating in Decreasing Periprosthetic Infection Using an *in vivo* Mouse Model.” Podium Presentation – Western Orthopaedic Association (WOA) Annual Meeting, Coeur d’Alene, ID, 2015.
17. Dworsky E, Stavrakis A, Loftin A, Hu Y, Richman S, Scaduto A, **Bernthal N**. “An *in vivo* Mouse Model of Spinal Implant Infection.” Podium Presentation – Western Orthopaedic Association (WOA) Annual Meeting, Coeur d’Alene, ID, 2015.
18. Johansen D, Hegde V, Loftin A, Hu Y, Scaduto A, **Bernthal N**. “Antibiotic Therapy in a Mouse Model of Spine Implant Infection.” Podium Presentation – Western Orthopaedic Association (WOA) Annual Meeting, Indian Wells, CA, 2016.
19. Arshi A, Sharim J, Park D, **Bernthal N**, Shamie A. “Chondrosarcoma of the Osseous Spine: An Analysis of 974 Cases Using the SEER Registry.” Podium Presentation – Western Orthopaedic Association (WOA) Annual Meeting, Indian Wells, CA, 2016.
20. Hegde V, Zoller S, Johansen D, Loftin A, Hamad C, Park H, Chun R, Adams J, **Bernthal N**. “Vitamin D deficiency increases bioluminescent bacterial burden and fluorescent neutrophil infiltration in an *in vivo* mouse model of periprosthetic joint infection.” Podium Presentation - Western Orthopaedic Association Annual Meeting; Kauai, HI. August 2017.
21. Hegde V, Zoller S, Chadhanayingyong C, Eilber FC, Eilber FR, Eckardt J, **Bernthal N**. Cement in Cement Technique for Revision Endoprostheses. Podium Presentation - Western Orthopaedic Association Annual Meeting; Kauai, HI. August 2017.
22. Zoller SD, Park HY, Hegde V, Sheppard W, Hamad C, Smith R, Clarkson S, Borthwell R, Rho K, Cevallos N, Proal J, Nelson S, Bernthal N. “Does Bone Equal Metal? A Novel Mouse Model

of Bulk Allograft Infection Demonstrates Increased Susceptibility To Infection Compared To Stainless Steel.” Western Orthopaedic Association Annual Meeting, Kauai, HI, August 4-5 2017. **Awarded Vernon Thompson Award for Top 2 Research Presentations.**

23. Park HY, Sheppard W, Hegde V, Zoller SD, Hamad C, Sprague M, Smith R, **Bernthal N.** "Vancomycin Powder Controls Bacterial Infection in a Novel Murine Model of Spinal Implant Infection.” Western Orthopaedic Association. Kauai, HI. August 2-5, 2017. **Top 7 Resident Paper Award Winner.**
24. Sheppard W, Park H, Zoller S, Hegde V, Burke Z, Blumstein G, Hamad C, **Bernthal N.** “Excising the Guesswork: Fluorescence-Guided infection Debridement Surgery within a Mouse Model of Spine Infection.” American Academy of Orthopaedic Surgeons. Las Vegas, NV. March 12-16, 2019.
25. Burke Z, Zoller S, Blumstein G, Hori K, Cevallos N, Villalpando C, Truong N, Proal J, **Bernthal N.** “Tobramycin-Loaded Poly (methlymethacrylate) Does Not Eradicate Infection and is Colonized by Bacteria in Mouse Model of Revision for Infection.” American Academy of Orthopaedic Surgeons. Las Vegas, NV. March 12-16, 2019.
26. Buke Z, Blumstein G, Hori K, Villalpando C, Zukotynski B, Uweh S, Stavrakis A, **Bernthal N.** “Perioperative Zoledronic Acid Increases Bacterial Burden in a Validated Model of Implant Infection.” American Academy of Orthopaedic Surgeons. Las Vegas, NV. March 12-16, 2019.
27. Burke Z, Xi W, **Bernthal N.** “Synthetic Networking of Low-Cost Polymeric Implant Coating Allows Sustained Releases and Prevents Infection In Vivo.” American Academy of Orthopaedic Surgeons. Las Vegas, NV. March 12-16, 2019.
28. Sheppard W, Park H, Hwang R, Bugarin A, Hamad C, Proal J, Smith R, Hornicek F, **Bernthal N.** “Analysis of Medical Malpractice Outcomes for Sarcoma Litigation in the United States.” American Academy of Orthopaedic Surgeons. Las Vegas, NV. March 12-16, 2019.
29. **Bernthal N.** “Biofilm, Persists and Beyond.” Network Session: Cutting Edge #1: Infections: Orthopaedics on the Verge of Evolution. California Orthopaedic Association Annual Meeting. Laguna Niguel, CA. May 17, 2019.

Local Presentations

1. **Bernthal N.** Research Frontiers – Mthatha Hospital Grand Rounds, Mthatha, South Africa (2008).
2. **Bernthal N.** UCLA Orthopaedics: A Resident’s Perspective – UCLA Orthopaedic Interview Day Presentation for Resident Applicants (2008).
3. **Bernthal N, Clarke K, Tung C, Desai A, Tap W.** Overcoming a Therapeutic Plateau: In vitro testing of a novel insulin growth factor I receptor antibody (AMG 479) on Ewing’s Sarcoma and osteosarcoma cell lines. Podium Presentation – Orthopaedic Hospital Research Day (2009). **Awarded Best Presentation of Conference.**

4. **Bernthal N.** Orthopaedic Emergencies – UCLA Department of General Surgery Grand Rounds (2009).
5. **Bernthal N.** Why Orthopaedics? -- David Geffen School of Medicine at UCLA Orthopaedic Interest Group (2009).
6. **Bernthal N.** UCLA Orthopaedics: A Resident's Perspective – UCLA Orthopaedic Interview Day Presentation for Resident Applicants (2009).
7. Kremen T, Estrada K, **Bernthal N**, Lyons K. BMP-inhibiting Smads in Bone. Wilson-Boost Meeting, UCLA April, 2009.
8. **Bernthal N**, Stavrakis A, Celestre P, Ludington J, Oakes D. Short-Term Results of the DePuy ASR XL. Podium Presentation – Orthopaedic Hospital Research Day (2010).
9. **Bernthal N**, Stavrakis A, Lieberman J, Garcia N, Kremen T, Oakes D, Finerman G, Miller L. Using Real-Time *in vivo* Bioluminescence and Fluorescence Imaging To Longitudinally Track Infection in a Post-Arthroplasty Mouse Model. Podium Presentation – Orthopaedic Hospital Research Day (2010).
10. Reid J, Kremen T, Estrada K, **Bernthal N**, Lyons K. Murine Model of Critical Defect Osteosynthesis Podium Presentation – Orthopaedic Hospital Research Day (2010).
11. Reid J, Kremen T, Estrada K, **Bernthal N**, Lyons K. Murine Model of Critical Defect Osteosynthesis Podium Presentation – UCLA/Orthopaedic Hospital Research Retreat (2010).
12. **Bernthal N.** Orthopaedic Techniques – UCLA Department of General Surgery Grand Rounds (2010).
13. Kremen T, Reid J, Estrada K, **Bernthal N**, Lyons K. BMP-Inhibiting Smads in Bone Healing and Development. Amgen-UCLA Collaboration Meeting, April, 2010.
14. **Bernthal N.** Post-Surgical Implant Infections and a Model for Reducing Them – Longmire Surgical Society Annual Research Day (2011).
15. **Bernthal N.** Mouse Modeling to Evaluate Dogma in Pediatric Spine Surgery – Orthopaedic Hospital Research Day (2011).
16. **Bernthal N.** Defining Innate Immunity Pathways after Arthroplasty – UCLA Department of Orthopaedic Surgery Grand Rounds (2011).
17. **Bernthal N.** From Bedside to Bench and Back: Translational Mouse Work on Infection – UCLA/Orthopaedic Hospital Research Retreat (2011).
18. **Bernthal N.** From AIDS to Orthopaedics: Medical Outreach in the Developing World. Orthopaedic Hospital Retreat (2012).

19. **Bernthal N**, Eilber F, Eilber F, Eckardt J. Total Femoral Endoprostheses: The UCLA Experience 1980-2011. UCLA Department of Orthopaedic Surgery Grand Rounds (2012).
20. **Bernthal N**. International Outreach in a Surgical Sub-Specialty. Orthopaedic Hospital Board of Governors Retreat (2012).
21. **Bernthal N**, Pribaz J, Niska J, Miller L. Translational Targets of a Post-Arthroplasty Mouse Model of Infection: Coatings, Immunology and Metallurgy. UCLA Department of Orthopaedic Surgery Academic Day (2012). **Winner of Best Presentation**.
22. **Bernthal N**. Basics of Orthopaedic Oncology. University of Utah Resident Lecture Series (2013).
23. **Bernthal N**. Board/Exam Training for Orthopaedic Oncology. University of Utah Resident Lecture Series (2013).
24. **Bernthal N**. Limb Salvage in Oncology Patients. Primary Children's Medical Center, Hematology/ Oncology Grand Rounds (2013).
25. **Bernthal N**. Orthopaedic Oncology Review. UCLA Resident Core Curriculum (2013).
26. **Bernthal N**. The Role of Surgeons in Global Health. UCLA Medical Center (2013).
27. **Bernthal N**. Where We Go From Here: The Role of Technological Advances in Orthopaedic Oncology. UCLA Department of Orthopaedic Surgery Grand Rounds. Invited Keynote Speaker (2013).
28. **Bernthal N**. Expanding Orthopaedic Outreach. Orthopaedic Institute for Children Board Meeting (2014).
29. **Bernthal N**. The Role of "Philanthropic" Medicine. Las Madrecitas Foundation Guest Speaker (2014).
30. **Bernthal N**. Orthopaedic Oncology at UCLA: Achievements and Directions. UCLA-Santa Monica Board Meeting (2014).
31. **Bernthal N**. From Westwood to East Africa: Orthopaedic Oncology Developments and Challenges. UCLA-Motion Picture Television Fund Gala. Invited Guest Speaker (2014).
32. **Bernthal N**. Doing the "Right" Thing: International Outreach in Financially Tight Times. Orthopaedic Institute for Children Fundraising Dinner. Invited Guest Speaker (2014).
33. **Bernthal N**. Who Drives Change? The Role of Students in Pushing the Social Agenda. Las Ninas de Madrecitas. Invited Guest Speaker (2014).

34. **Bernthal N.** Improving Implants: Directions for Implant Design in Orthopaedic Oncology. Harbor-UCLA Department of Orthopaedic Surgery Grand Rounds. Invited Keynote Speaker (2014).
35. **Bernthal N.** The Role of Surgery in International Health. UCLA Center for World Health Roundtable Discussion (2014).
36. Dworsky E, Stavrakis A, Loftin A, Hu Y, Richman S, Scaduto A, **Bernthal N.** An in vivo Mouse Model of Spinal Implant Infection. Podium Presentation – Longmire Surgical Society Annual Research Day (2015).
37. Stavrakis A, Loftin A, Dworsky E, Richman S, Billi F, **Bernthal N.** Assessment of a Novel Antibiotic Coating in Decreasing Periprosthetic Infection Using an in vivo Mouse Model – Longmire Surgical Society Annual Research Day (2015).
38. Stavrakis A, Patel A, Burke Z, Loftin A, Dworsky E, Silva M, **Bernthal N.** The Role of Chairman and Research Director in Influencing Scholarly Productivity and Research Funding in Academic Orthopaedic Surgery. Poster Presentation – Longmire Surgical Society Annual Research Day (2015).
39. Stavrakis A, Patel A, Burke Z, Loftin A, Dworsky E, Silva M, **Bernthal N.** The Relationship between National Institutes of Health Funding and Research Impact in Orthopaedic Surgery. Poster Presentation – Longmire Surgical Society Annual Research Day (2015).
40. **Bernthal N.** A Programmatic Approach to Implant Infection. AOA-ASEAN Traveling Fellows Guest Lecture. June 8, 2016.
41. **Bernthal N.** Orthopaedic Research Update. Orthopaedic Institute for Children Board of Directors Meeting. August 9, 2017.
42. **Bernthal N.** The Wild West of Orthopaedic Oncology. North American Traveling Fellows Guest Lecture. October 13, 2017.

COURSES:

1. Lumps and Bumps for the Medical Internist. UCLA Office of Continued Medical Education. Las Vegas, NV. April 2014.
2. Bone and Implant Infections. Musculoskeletal Seminar Series – T-32 Training Program. Los Angeles, CA. January 2015.
3. Musculoskeletal Imaging. UCLA Medical School. Los Angeles, CA. December 2015.
4. BSTT Madrid Course. Bone and Soft Tissue Tumors. Madrid, Spain. February 2019.

MEDIA:

1. Featured on ESPN Radio Weekend Warrior, April 25, 2015.
2. Featured on Becker's Orthopaedics: Orthopaedic Surgeon Leader to Know, June 23, 2016.

3. Featured on Business Wire, November 10, 2016.
4. Featured on Business Wire, September 19, 2017.

SERVICE:

1. Founder and President of Drops Fill Buckets, a 501c3 non-profit that raises money for education and health projects worldwide. Have raised over \$500,000 for philanthropic projects since inception.
2. Built and Operate Hospital Wing in Orissa, India.
3. Director of UCLA Global Orthopaedic Outreach Program. Sends surgeons to underserved hospitals in Ethiopia to teach, train, and perform surgeries.
4. Watts Bears Team Physician, 2015-present.
5. Medical Advisory Board, Los Angeles Zoo, 2015-present.
6. Gold Humanism Honor Society Committee, David Geffen School of Medicine UCLA, 2016-present.