

CURRICULUM VITAE
VALENTIN ANTOCI MD PHD

University Orthopedics Inc, Providence RI
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Hip and Knee Reconstruction Surgeon
Director, Outpatient Adult Reconstruction
Assistant Professor of Orthopedic Surgery
Alpert Medical School of Brown University

EDUCATION:

- Fellowship Massachusetts General Hospital, 55 Fruit St, Boston MA 02141
Harris Adult Reconstructive Surgery Fellowship, August 2014 – August 2015
- Residency **Massachusetts General Hospital, 55 Fruit St, Boston, MA 02141**
Chief Resident, Orthopaedic Surgery, Dr. Harry Rubash, 2015
- Harvard Combined Orthopaedic Surgery**
Massachusetts General Hospital, 55 Fruit St, Boston MA 02141
Brigham and Women's Hospital, 75 Francis St, Boston MA 02115
Beth Israel Deaconess Medical Center, 330 Brookline Ave, Boston MA 02115
Boston Children's Hospital, 300 Longwood Ave, Boston MA 02115
PGY 2-PGY 4, Orthopedic Surgery June 2010 – July 2014
- Massachusetts General Hospital, 55 Fruit St, Boston, MA 02141**
Internship, General Surgery, June 2009 – June 2010
- Medical School **Thomas Jefferson University, Jefferson Medical College, Philadelphia, PA 19107**
August 2002 – June 2009
- Honors:
Alpha Omega Alpha (AQA) National Honor Medical Society, 2008
American Medical Association, 2008
Hobart Amory Hare Honor Medical Society, 2008
Association of Pathology Chairs (APC) National Pathology Honor Society, 2004
Foerderer Grant for International Study - \$2,500, 2004
- PhD **Thomas Jefferson University, College of Graduate Studies, Philadelphia, PA 19107**
TISSUE ENGINEERING AND REGENERATIVE MEDICINE, August 2002 – June 2009
- Dissertation: *Engineering of Antibiotic Modified Implants in the Management of Periprosthetic Infection*
PhD, Successfully Defended June 8, 2007
- Honors:
Alumni Thesis Award, 2009
American Association for the Advancement of Science Mention, 2008
Measey Foundation Scholar, Fellowship, 2002-2009
Dubbs Fellowship, Graduate Educational Grant, 2002-2004
- Undergraduate **Concord College, Athens, WV, 1000 Vermillion St, Athens, WV 24712**
Biology (Major), Chemistry (Minor), Hospitality Management (Minor)
Bachelor of Sciences, Magna Cum Laude, 2002
- Honors:
Marsh Presidential Scholarship of Distinction, 2000-2002
Who's Who Among Students in American Universities and Colleges, April 2002
Gamma Beta Phi Honor and Service Society, Secretary, 2001-2002
Blue Key National Honor Society, President, 2001-2002
International Student Association, Secretary, 2001-2002
Student Support Services, Accomplished Counselor and Tutor, 2001-2002
National Dean's List, 2001-2002

POSTGRADUATE HONORS AND AWARDS

Brown University Orthopedic Residency Program, Excellence in Teaching Award, class of 2019	2019
Rhode Island Medical Society, Best Resident Paper Award – Jacob Babu PGY 5	2019
New England Orthopedic Society, Keynote Speaker, Fall Meeting	2018
National Institutes Of General Medical Sciences, CTR Grant Recipient	2018
New England Orthopedic Society, Best Resident Paper Award – Jacob Babu PGY 4	2018
Most Entertaining Award, Dancing with the Doctors, Providence RI	2018
Grand Rounds Speaker: Engineering Smart Implants in Orthopedics. February 3	2017
Walk to Cure Arthritis Medical Honoree, Arthritis Foundation	2017
Best Basic Science Research Award, Harvard Combined Orthopaedic Residency Program, \$500	2014
Eastern Orthopaedic Association, Best Resident/Fellow Paper Award, \$2,500	2007
International Society for Technology in Arthroplasty, Ernesto De Santis Best Paper Award, \$5000	2006
Infectious Diseases Society of America Edward H. Kass Fellowship Award, \$1,000	2006
MusculoSkeletal Infection Society, Jeannette Wilkins Award, Best Basic Science Paper, \$1,000	2006
MusculoSkeletal Infection Society Resident/Trainee Award, \$1,500	2006
American Academy of Orthopaedic Surgery, Best Paper Award	2006

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

Massachusetts Medical License 259020, March 2020

Rhode Island Medical License MD14915, June 2020

American Board of Orthopaedic Surgery, Board Certified August 2017

ACADEMIC APPOINTMENTS

Instructor, Harvard Medical School, Massachusetts General Hospital, August 2014 – August 2015

Assistant Professor, Department of Orthopedic Surgery, Warren Alpert Medical School of Brown University, August 2015

HOSPITAL APPOINTMENTS

Orthopaedic Surgery, Massachusetts General Hospital, Boston, MA, August 2014 – August 2015

Orthopaedic Surgery, Newton Wellesley Hospital, Wellesley, MA, August 2014 – August 2015

Orthopedic Surgery, Rhode Island Hospital, Providence, RI, August 2015

Orthopedic Surgery, Miriam Hospital, Providence, RI, August 2015

Orthopedic Surgery, Newport Hospital, Newport, RI, August 2015

East Bay Surgery Center, University Orthopedics, E. Providence, RI, August 2018

OTHER APPOINTMENTS

Rhode Island Orthopedic Society Board of Directors	2018 through present
Journal of Orthopaedic Trauma, Associate editor	2014 through present
reviewer	2007 through present
Arthroplasty Today, Associate editor	2015 through present
Int. Journal of Bone and Rheum Res., Editorial Board, reviewer	2015 through present
Journal of Orthopaedic Research, reviewer	2015 through present
Journal of Arthroplasty, reviewer	2015 through present
BMC Infectious Diseases, reviewer	2013 through present
Clinical Orthopaedics and Related Research, reviewer	2012 through present
Canadian Institutes of Health Research, reviewer	2011 through present

HOSPITAL COMMITTEES

Harvard Residency Council, Massachusetts General Hospital, Boston, MA	2010-2014
Credentialing Committee, Newport Hospital, Newport, RI	2015-2018

UNIVERSITY COMMITTEES

MEMBERSHIP IN SOCIETIES

American Association of Hip and Knee Surgeons	2015
Rhode Island Medical Society	2016
American Academy of Orthopaedic Surgery	2009
Orthopaedic Research Society	2008
Massachusetts Medical Society	2009
Alpha Omega Alpha (ΑΩΑ) National Honor Medical Society	2008
American Medical Association	2008

PUBLICATION LIST

ORIGINAL PUBLICATIONS IN PEER REVIEWED JOURNALS

1. Roberts CS, Antoci V, **Antoci V Jr.**, Voor MJ. **The accuracy of fine wire tensioners: a comparison of five wire tensioners used in hybrid and ring external fixation.** Journal of Orthopaedic Trauma. 18:158-62, 2004.
2. Voor MJ, Antoci V, **Antoci V Jr.**, Roberts CS. **The effect of wire plane tilt and olive wires on proximal tibia fracture fragment stability and fracture site motion.** Journal of Biomechanics. 38:537-41, 2005.
3. Antoci V, Roberts CS, **Antoci V Jr.**, Voor MJ. **The effect of transfixion wire number and spacing between two levels of fixation on the stiffness of proximal tibial external fixation.** Journal of Orthopaedic Trauma. 19:180-6, 2005.
4. Roberts CS, Antoci V, **Antoci V Jr.**, Voor MJ. **The effect of transfixion wire crossing angle on the stiffness of fine wire external fixation: a biomechanical study.** Injury. 36:1107-12, 2005.
5. Jose, B, **Antoci V Jr.**, Zeiger AR, Wickstrom E, Hickok NJ. Vancomycin Covalently Bonded to Titanium Beads is Active and Bactericidal against Staphylococcus Aureus. *Chemistry and Biology.* 12(9):1041-8, 2005.
6. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **Biomechanics of fine wire positioning and tensioning characteristics.** Journal of Pediatric Orthopaedics. 25:798-803, 2005.
7. Antoci V, Ono CM, **Antoci V Jr.**, Raney EM. **Axial deformity correction in children via distraction osteogenesis.** International Orthopaedics. 30:278-83, 2006.
8. Antoci V, Raney EM, **Antoci V Jr.**, Voor MJ, Roberts CS. **Transfixion wire positioning within bone: an option to control proximal tibia external fixation stiffness.** Journal of Pediatric Orthopaedics. 26:466-70, 2006.
9. Antoci V, Ono CM, **Antoci V Jr.**, Raney EM. **Bone lengthening in children: how to predict the complications rate and complexity?** Journal of Pediatric Orthopaedics. 26:634-40, 2006.
10. Parvizi J, **Antoci V Jr.**, Hickok NJ, Shapiro IM. **Selfprotective smart orthopaedic implants.** Expert Review of Medical Devices. 4:55-64, 2007.
11. Edupuganti OP, **Antoci V Jr.**, King SB, Jose B, Adams CS, Parvizi J, Shapiro IM, Zeiger AR, Hickok NJ, Wickstrom E. **Covalent bonding of vancomycin to Ti6Al4V alloy pins provides long-term inhibition of Staphylococcus aureus colonization.** Bioorganic and Medicinal Chemistry Letters. 17:2692-6, 2007.
12. **Antoci V Jr.**, King SB, Jose B, Parvizi J, Zeiger AR, Wickstrom E, Freeman TA, Composto RJ, Ducheyne P, Shapiro IM, Hickok NJ, Adams CS. **Vancomycin Covalently Bonded to Titanium Alloy Prevents Bacterial Colonization.** Journal of Orthopaedic Research. 25:858-66, 2007.
13. **Antoci V Jr.**, Adams CS, Parvizi J, Ducheyne P, Shapiro IM, Hickok NJ. **Covalently Attached Vancomycin Provides a Nanoscale Antibacterial Surface.** Clinical Orthopaedics and Related Research. 461:81-7, 2007.
14. **Antoci V Jr.**, Adams CS, Hickok NJ, Shapiro IM, Parvizi J. **Vancomycin Bound to Ti Rods Reduces Periprosthetic Infection: Preliminary Study.** Clinical Orthopaedics and Related Research. 461:88-95, 2007.
15. **Antoci V Jr.**, Adams CS, Hickok NJ, Shapiro IM, Parvizi J. **Antibiotics for local delivery systems cause skeletal cell toxicity in vitro.** Clinical Orthopaedics and Related Research. 462:200-6, 2007.
16. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **Effect of wire tension on stiffness of tensioned fine**

- wires in external fixation: a mechanical study.** American Journal of Orthopaedics. 36:473-6, 2007.
17. Radin S, **Antoci V Jr.**, Hickok N, Adams CS, Parvizi J, Shapiro I, Ducheyne P. **In vitro and in vivo bactericidal effect of sol-gel/antibiotic thin films on fixation devices.** Key Engineering Materials. 330-332:1323-1325, 2007.
 18. Parvizi J, **Antoci V Jr.** **Prophylactic Antibiotics for Joint Arthroplasty: Which One and for How Long?** Orthopaedics Today. 28:26, 2008.
 19. Antoci V, Phillips MJ, **Antoci V Jr.**, Krackow KA. **The Treatment of Recurrent Chronic Knee Arthroplasty With a 2-Stage Procedure.** Journal of Arthroplasty. 24(1):159.e13-7, 2009
 20. **Antoci V Jr.**, Adams CS, Parvizi J, Davidson HM, Composto RJ, Freeman TA, Wickstrom E, Ducheyne P, Jungkind D, Shapiro IM, Hickok NJ. **The Inhibition of Staphylococcus Epidermidis Biofilm Formation by Vancomycin-modified Titanium Alloy and Implications for the Treatment of Periprosthetic Infection.** Biomaterials. 29(35):4684-90, 2008
 21. Antoci V, Ono CM, **Antoci V Jr.**, Raney EM. **Comparison of distraction osteogenesis for congenital and acquired limb-length discrepancy in children.** Orthopaedics. 31(2):129, Feb 2008
 22. Antoci V, Ono CM, Antoci V Jr, Raney EM. **Bone Lengthening in Children: How to Predict the Complications Rate and Complexity. Author's Response.** J Pediatr Orthop. 28(5):597-598. 2008
 23. Antoci V, Ono CM, **Antoci V Jr.**, Raney EM. **Pin-tract infection during limb lengthening using external fixation.** Am J Orthop. 37(9):E150-4, Sep 2008.
 24. **Antoci V Jr.**, Hilibrand AS. **Non-specific Back Pain: Approach and Management.** Future Rheumatology. 3(5):485-92, October 2008
 25. Antoci V, Ono CM, **Antoci V Jr**, Raney EM. **Author's Response.** J. Pediatr Orthop. 28(5):597-598. 2008.
 26. Antoci V, Phillips MJ, **Antoci V Jr.**, Krackow KA. **Using an antibiotic-impregnated cement rod-spacer in the treatment of infected total knee arthroplasty.** Am J Orthop. 38(1):31-2, Jan 2009.
 27. Adams CS, **Antoci V Jr.**, Harrison G, Patel P, Freeman TA, Shapiro IM, Parvizi J, Hickok NJ, Radin S, Ducheyne P. **Controlled Release of Vancomycin from Thin Sol-Gel Films on Implant Surfaces Successfully Controls Osteomyelitis.** Journal of Orthopaedic Research. 27(6): 701-9, 2009.
 28. Freeman TA, Patel P, Parvizi J, **Antoci V Jr.**, Shapiro IM. **Micro-CT Analysis with Multiple Thresholds Allows Detection of Bone Formation and Resorption During Ultrasound-Treated Fracture Healing.** Journal of Orthopaedic Research. 27(5):673-9, 2009.
 29. Parvizi J, **Antoci V Jr.**, Freeman TA, Shapiro IM, Hickok NJ, Adams CA. **Periprosthetic Infection: Ideal Place for Biological Implants.** J Bone Joint Surg Br. 91B (S1): 176-176. 2009.
 30. Ghanem E, **Antoci V Jr.**, Sharkey PF, Barrack R, Spangehl M, Parvizi J. **Periprosthetic Infection: Threshold Values for ESR and CRP.** J Bone Joint Surg Br. 91B (S2): 308-308. 2009.
 31. Ketonis C, Ghanem E, **Antoci V Jr.**, Joshi A, Barrack R, Parvizi J. **Periprosthetic Infection: Where Do We Stand with Regard to Gram Stain?** J Bone Joint Surg Br. 91B (S2): 310-310. 2009.
 32. Ghanem E, **Antoci V Jr.**, Pulido L, Joshi A, Hozack W, Parvizi J. **The use of receiver operating characteristics analysis in determining erythrocyte sedimentation rate and C-reactive protein levels in diagnosing periprosthetic infection prior to revision total hip arthroplasty.** International Journal of Infectious Diseases. 13(6):444-9, 2009.
 33. Parvizi J, Jacovides C., **Antoci V. Jr.**, Ghanem E. **Diagnosis of Periprosthetic Joint Infection: the Utility of a Simple Yet Unappreciated Enzyme.** J Bone Joint Surg Am. 93(24):2242-8, 2011.
 34. **Antoci, V. Jr.** **Reaming as an Adjuvant to Irrigation on Bacterial Presence and Propagation: An Open, Cadaveric Intramedullary Fracture Model.** J Orthop Trauma. 25(6):330-331, 2011.
 35. Parvizi J, Jacovides C., **Antoci V. Jr.**, Ghanem E. **Diagnosis of Periprosthetic Joint Infection: the Utility of a Simple Yet Unappreciated Enzyme.** Orthopedics. 35(2):134-134, 2012.
 36. Bashinskaya B., Zimmerman R.M., Walcott BP, **Antoci V. Jr.** **Arthroplasty Utilization in the United States is Predicted by Age-Specific Population Groups.** ISRN Orthopedics. 2012.
 37. **Antoci V.**, Appleton P., Rodriguez EK. **Fixation of Fractures Around Unstable Hip Implants.** Techniques in Orthopaedics. 28(3):208-217, 2013.
 38. Mantu D, **Antoci V**, Mangalagiu I. **Design, synthesis and antimycobacterial activity of some new pyridazine derivatives: bis-pyridazine.** Infect Disord Drug Targets. 13(5): 344-51. 2013.

39. Black EM, **Antoci V Jr.**, Lee JT, Weaver MJ, Johnson AH, Susarla SM, Kwon JY. **Role of preoperative computed tomography scans in operative planning for malleolar ankle fractures.** *Foot Ankle Int.* 2013
40. Diaz-Ledezma C., Parvizi J., Zhou Y, **Antoci V.**, Ducheyne P., et al. **Prosthesis Selection.** *J. Orthop Res.* 32(1S):90-7, 2014.
41. **Antoci V.**, Appleton P., Rodriguez EK. **Fixation of Fractures Around Unstable Hip Implants.** *Techniques in Orthopaedics.* 29(4):200-209, 2014.
42. Diaz-Ledezma C., Parvizi J., Zhou Y, **Antoci V.**, Ducheyne P., et al. **Prosthesis Selection.** *J. Arthroplasty.* 29(2S):71-6, 2014
43. Foster S, Hambright DS, Greene ME, **Antoci V.**, Malchau H, Kwon YM. **Effects of Obesity on Health Related Quality of Life Following Total Hip Arthroplasty.** *J. Arthroplasty.* 2015 30 (9): 1555-1560, 2015.
44. Tiberi JV, **Antoci V Jr.**, Malchau H, Rubash HE, Freiberg AA, Kwon YM. **What is the Fate of THA Acetabular Component Orientation When Evaluated in the Standing Position?** *J. Arthroplasty.* 30(9): 1551-1554, 2015.
45. Kwon YM, **Antoci V Jr.**, Eisemon E, Tsung-Yang T, Liow MH. **“Top-Out” Removal of Well Fixed Dual-Taper Femoral Stems: Surgical Technique and Radiographic Risk Factors.** *Journal of Arthroplasty.* 31 (12), 2843-2849. 2016.
46. Kwon YM, **Antoci V Jr.**, Leone WA, Tsai TY, Dimitriou D, Liow MH. **Utility of Serum Inflammatory and Synovial Fluid Counts in the Diagnosis of Infection in Taper Corrosion of Dual Taper Modular Stems.** *J. Arthroplasty.* Sep 31(9):1997-2003. 2016.
47. Patel S., **Antoci V Jr.**, Kadzielski J, Vrahas MS. **Exactech Opteon Femoral Component Fracture 12 Years Post-Arthroplasty.** *Case Reports in Orthopaedics.* 1789197, 2016.
48. **Antoci V. Jr.**, Weaver M.J., Ellington J.K., Kwon J.Y. **Relevance of Adjacent Imaging in Evaluation of Ankle Fractures.** *Injury.* 47 (10), 2366-2369. 2016
49. Tobert D, **Antoci V Jr.**, Patel S, Saadat E. Etiologic Considerations and Review of Adjacent Segment Disease in the Cervical and Lumbar Spine. *Clinical Spine Surgery.* 30 (3) 94-101. 2017.
50. Bedair H, **Antoci V Jr.**, Heaven S. **Line-to-Line Reaming of Highly Porous Acetabular Components Improves Position and Reduces Variability of Component Placement.** *J Hip Surgery.* 01 (04): 180-185, 2017
51. Barile A, Bruno F, **Antoci V.** et al. **Emergency and Trauma of the Ankle.** *Seminars in Musculoskeletal Radiology.* 21(3): 282-289. 2017.
52. Cohen EM, Patel SP. **Antoci V Jr. A 77-year-old woman with right hip fluid collection.** *Orthopedics Today.* May 2017.
53. Eltorai EM, Szabo AL, **Antoci V.** et al. **Clinical Effectiveness of Incentive Spirometry for the Prevention of Postoperative Pulmonary Complications.** *Respiratory care.* 7 (63): Jul 2018
54. Eltorai EM, Baird GL, Eltorai AS, Pangborn J, **Antoci V.** et al. **Perspectives on Incentive Spirometry Utility and Patient Protocols.** *Respiratory Care.* 7 (63):Jul 2018
55. Eltorai EM, Baird GL, Eltorai AS, Pangborn J, **Antoci V.** et al. **Incentive Spirometry Adherence: A National Survey of Provider Perspectives.** *Respiratory care.* 7 (63): Jul 2018
56. Eltorai EM, Baird GL, Pangborn BS, **Antoci V.**, et al. **Financial Impact of Incentive Spirometry.** *Inquiry.* Sep 2018
57. Babu JM, Kalagara S, Durand W, **Antoci V.**, et al. **Sarcopenia as a Risk Factor for Periprosthetic Infection after Total Hip or Knee Arthroplasty.** *J. Arthroplasty.* 34(1):116-22. Jan 2019
58. Aboltins CA, **Antoci V.**, et al. **Hip and Knee Section, Prevention, Prosthesis Factors: Proceedings of International Consensus on Orthopedic Infection.** *J. Arthroplasty.* 34(2): Feb 2019
59. Saeed K, McLaren AC, **Antoci V.**, et al. **The 2018 International Consensus Meeting on Musculoskeletal Infection: Summary from the Biofilm Workgroup and consensus on Biofilm related Musculoskeletal Infections.** *J. Orthop Res.* 37 (5): 1007-1017. 2019
60. Johnson J, Cohen EM, **Antoci V.** **Treatment of a Periprosthetic Femur Fracture Around an Antibiotic Spacer with Revision and an Antibiotic Plate.** *Arthroplasty Today.* In Print 2019
61. Garcia DR, Gardezi M, Roque D, et al. **Antoci V.**, Born C. **Irrigation in Orthopedic Open Fractures: A Review.** *Journal of Orthopaedic Trauma.* Draft. 2019.
62. Patel SA, Moon AS, Cohen EM, Froehlich JA, Jenkins D, **Antoci V.** **Applicant Ranking Criteria in Adult Reconstruction Fellowship: Your Interview Counts When Applying for**

Fellowship. Arthroplasty Today. 2019

63. Orfanos A, Glasser J, Froehlich JA, **Antoci V.** **Self-directed Exercise is Equivalent to Physical Therapy after Total Knee Arthroplasty.** JBJS. Draft. 2019
64. Berns E, Barrett C, et al. **Antoci V,** Born CT, Garcia DR. **Current Clinical Methods for Detection of Periprosthetic Joint Infection.** Journal of Surgical Infections-Draft 2019.
65. Gardezi M, et al. **Antoci V,** Born CT, Garcia DR. **Fluorescent-Conjugated Antibodies as Ex Vivo Markers of Bacterial Infection on Surgical Sites.** Journal of Orthopaedic Surgery. Draft 2019
66. **Antoci V Jr.,** Gardezi M, Glasser J, Spake CS, Born CT, Garcia DR. **Irrigation and Debridement in Orthopedic Surgery – Science and Myth.** Journal of Surgical Infections-Draft 2019.

SCIENTIFIC EXHIBITS

1. **Antoci V Jr.,** Adams C, Freeman T, Davidson H, Ketonis C, Shapiro I, Hickok NJ, Parvizi J. **Novel Implant Design With Covalently-Linked Antibiotics Inhibits Periprosthetic Infection.** *Proceedings of the 75th Combined Meeting of the American Academy of Orthopaedic Surgeons*, March 5-9, 2008, San Francisco, California, USA.
2. Mariorenzi M, **Antoci V Jr.,** Cohen EM. **Utilization of carbon fiber rod augment in creation of non-articulating antibiotic knee spacer.** *Proceedings of the American Academy of Orthopaedic Surgeons*, 2020, San Diego, USA.

BOOK AND BOOK CHAPTERS

1. **Antoci V Jr.,** Ono C, Raney EM, Antoci V. **Deformity Correction in Children via Distraction Osteogenesis.** *Biomedical Engineering, Recent Developments.* Editor. Nazeran H, Goldman M., Schoethoerster R. ISBN 978-1-930636-07-1. Sunshine, MD: Medical and Engineering Publishers, Inc. 2008.
2. **Antoci V Jr.,** Phillips MJ, Krockow KA, Antoci V. **A New Option for Treatment of Periprosthetic Infections After Total Knee Arthroplasty.** *Biomedical Engineering, Recent Developments.* Editor. Nazeran H, Goldman M., Schoethoerster R. ISBN 978-1-930636-07-1. Sunshine, MD: Medical and Engineering Publishers, Inc. 2008.
3. **Antoci V Jr.,** Antoci V. **A Simple New Hybrid External Fixator.** *Biomedical Engineering, Recent Developments.* Editor. Nazeran H, Goldman M., Schoethoerster R. ISBN 978-1-930636-07-1. Sunshine, MD: Medical and Engineering Publishers, Inc. 2008.
4. **Antoci V Jr.,** Voor MJ, Roberts CS, Antoci V. **Is There a Biomechanical Difference Between Commercially Available Hybrid External Fixators?** *Biomedical Engineering, Recent Developments.* Editor. Nazeran H, Goldman M., Schoethoerster R. ISBN 978-1-930636-07-1. Sunshine, MD: Medical and Engineering Publishers, Inc. 2008.
5. **Antoci V Jr.,** Phillips MJ, Krackow KA, Antoci V. **A New Option for Treatment of Periprosthetic Fixation.** *Biomedical Engineering, Recent Developments.* Editor. Nazeran H, Goldman M., Schoethoerster R. ISBN 978-1-930636-07-1. Sunshine, MD: Medical and Engineering Publishers, Inc. 2008.
6. **Antoci V Jr.,** Voor MJ, Roberts CS, Antoci V. **Sagittal Stiffness of Proximal Tibia External Fixation and Transfixion Wire Positioning within the Bone.** *Biomedical Engineering, Recent Developments.* Editor. Nazeran H, Goldman M., Schoethoerster R. ISBN 978-1-930636-07-1. Sunshine, MD: Medical and Engineering Publishers, Inc. 2008.
7. **Antoci V Jr.,** Voor MJ, Roberts CS, Antoci V. **Transfixion Wires Biomechanical Characteristics.** *Biomedical Engineering, Recent Developments.* Editor. Nazeran H, Goldman M., Schoethoerster R. ISBN 978-1-930636-07-1. Sunshine, MD: Medical and Engineering Publishers, Inc. 2008.
8. **Antoci V Jr.,** Parvizi J, Adams CS, Shapiro IM, Freeman TA. **Ultrasound Speeds Fracture Healing by Increased COX-2, MMP-13, and Osteopontin Expression.** *Biomedical Engineering, Recent Developments.* Editor. Nazeran H, Goldman M., Schoethoerster R. ISBN 978-1-930636-07-1. Sunshine, MD: Medical and Engineering Publishers, Inc. 2008.
9. **Antoci V Jr.,** Adams CS, Parvizi J, Shapiro IM, Hickok NJ. **Vancomycin-engineered Implants Promote Bone Cell Proliferation and Differentiation.** *Biomedical Engineering, Recent*

- Developments.** Editor. Nazeran H, Goldman M., Schoethoerster R. ISBN 978-1-930636-07-1. Sunshine, MD: Medical and Engineering Publishers, Inc. 2008.
10. **Antoci V Jr.,** Parvizi J, Adams CS, Shapiro IM, Hickok NJ. **Permanently Tethered Vancomycin Shows no Antibiotic Resistance.** *Biomedical Engineering, Recent Developments.* Editor. Nazeran H, Goldman M., Schoethoerster R. ISBN 978-1-930636-07-1. Sunshine, MD: Medical and Engineering Publishers, Inc. 2008.
 11. **Antoci V Jr.,** Adams CS, Hickok NJ, Shapiro IM, Parvizi J. **Nanoscale Vancomycin-Engineered Implants Inhibit Bone Infection.** *Biomedical Engineering, Recent Developments.* Editor. Nazeran H, Goldman M., Schoethoerster R. ISBN 978-1-930636-07-1. Sunshine, MD: Medical and Engineering Publishers, Inc. 2008.
 12. **Antoci V Jr.,** Adams CS, Shapiro IM, Parvizi J. **Simple Reproducible Rat Implant Associated Infection.** *Biomedical Engineering, Recent Developments.* Editor. Nazeran H, Goldman M., Schoethoerster R. ISBN 978-1-930636-07-1. Sunshine, MD: Medical and Engineering Publishers, Inc. 2008.
 13. **Antoci V Jr.,** Hilibrand AS. **The Adjacent Level Problem in the Cervical and Lumbar Spine.** In *Technical Caveats of Minimally Invasive Spinal Surgery – Clinical Examples of Anatomy, Biomechanics, Biologics, and Revision Strategies.* Editors: Kai-Uwe Lewandrowski *et al.* New York, NY: Informa Inc. 2010.
 14. **Antoci V Jr.,** Parvizi J. **Orthopaedic Implant Use and Infection.** In *Comprehensive Biomaterials.* Editors: Ducheyne P *et al.* New York, NY: Elsevier 2011.
 15. **Antoci V Jr.,** Burke DW. **Component Positioning in Total Hip Arthroplasty.** In *The Hip: Preservation, Replacement, and Revision.* Towson, MD: Data Drace Publishing 2015.
 16. **Antoci V Jr.,** Bedair H, Della Valle C. **Acute Periprosthetic Joint Infections: Diagnostic Considerations.** In *Periprosthetic Infections: Changing Paradigms.* Editors: Daniel O. Kendoff, Rhidian Morgan-Jones, and Fares S. Haddad. Marlton, NJ: Springer 2015.
 17. Antoci V Jr. in Abdeen A. **Reconstruction.** In *Orthopaedic Surgery Examination and Board Review.* Editors: Manish K. Sethi. New York, NY: McGraw Hill 2016.
 18. **Antoci V Jr.,** Chen AF, Parvizi J. **Orthopedic Implant Use and Infection.** Comprehensive Biomaterials II. New York, NY:Elsevier 2017.
 19. Cohen EM, **Antoci V.** **Total Hip Arthroplasty for the Treatment of Failed Acetabular Fractures.** Arthroplasty for the Treatment of Failed Acetabular Fractures. Marlton, NJ: Springer 2018.
 20. **Antoci V Jr.,** Garcia D, Glasser J, Shukla AM. **Osteolysis and Implant Loosening.** Orthopedic Basic Science: Foundations of Clinical Practice. 5th Ed. Chicago Il:Amer Acad of Orthopaedic 2019.

PUBLICATIONS SUBMITTED

ABSTRACTS

SELECTED PAPER PRESENTATIONS

1. Antoci V. **Orthopedic Translation: Bench to Clinic. Improving Arthroplasty Outcomes.** *New England Orthopedic Society, 2018 Fall meeting, Boston, MA, 11/2018*
2. Babu J, Kalagara S, Dominguez L, Durand W, Antoci V, Deren M, Cohen E. **Sarcopenia as a Risk Factor for Prosthetic Infection after Total Hip or Knee Arthroplasty: A New Era of Screening.** *New England Orthopedic Society, 2018 spring meeting, Harwich, MA, 06/2018*
3. Cohen EM, Ritterman S, Tuttle J, Antoci V, Rubin L. **Heterotopic Ossification after the Direct Anterior Approach Total Hip Arthroplasty.** *Proceedings of the 52nd Annual Meeting of the Orthopaedic Research Society, March 19-22, 2017, San Diego, CA, USA.*
4. O'Donnell S, Mariorenzi M, Antoci V. **Accuracy Of Femoral Cut Angle Using Standard Valgus Cutting Jig.** *Proceedings of the Eastern Orthopaedic Association EOA.* Miami, FL. Oct 18-21, 2017.
5. Bokshan SL, Ruttiman R, Eltorai AEM, DePasse JM, Antoci V, Daniels AH. **Factors Associated with Outcome of Litigation Following Total Hip and Knee Arthroplasty.** The American Orthopaedic Association 2017 Meeting, Charlotte, NC, June 20-24, 2017.
6. Antoci V. Jr. **Advances in Joint Replacement and Rehabilitation Implications.** Southern New England Rehabilitation Conference October 28, 2016

7. Antoci V Jr. **Physical Examination of the Hip.** Current Concepts in Active Adult Hip and Knee Orthopedics for the Primary Care Provider. Providence RI 2015.
8. Antoci V. Jr., Weaver M.J., Ellington J.K., Kwon J.Y. Relevance of Adjacent Imaging in Evaluation of Ankle Fractures. *Proceedings of the 79th Annual Meeting of the American Academy of Orthopaedic Surgeons, February 16-19, 2012, San Francisco, CA, USA.*
9. **Antoci V Jr.,** Ketonis C, Adams CS, Parvizi J, Shapiro IM, Hickok NJ. **Vancomycin-Implant Shows Bactericidal Activity While Remaining Biocompatible.** *Proceedings of the 27th Annual Meeting of the European Bone and Joint Infection Society (EBJIS), September 18-20, 2008, Barcelona, Spain.*
10. Ketonis C, **Antoci V Jr.,** Adams CS, Parvizi J, Hickok NJ. **Ti Surface Characteristics Stay Intact After Attachment of Antibiotics.** *Proceedings of the 27th Annual Meeting of the European Bone and Joint Infection Society (EBJIS), September 18-20, 2008, Barcelona, Spain.*
11. Aiyer A., **Antoci V Jr.,** Ketonis C., Hickok NJ, Parvizi J. **Vancomycin-Implant Does Not Induce Resistance Development.** *Proceedings of the 27th Annual Meeting of the European Bone and Joint Infection Society (EBJIS), September 18-20, 2008, Barcelona, Spain.*
12. **Antoci V Jr.,** Adams CS, Shapiro IM, Parvizi J. **Simple Reproducible Rat Implant Associated Infection.** *Proceedings of the 24th Southern Biomedical Engineering Conference, April 18-20 2008, El Paso, TX.*
13. **Antoci V Jr.,** Adams CS, Hickok NJ, Shapiro IM, Parvizi J. **Nanoscale Vancomycin-Engineered Implants Inhibit Bone Infection.** *Proceedings of the 24th Southern Biomedical Engineering Conference, April 18-20 2008, El Paso, TX.*
14. **Antoci V Jr.,** Parvizi J, Adams CS, Shapiro IM, Hickok NJ. **Permanently Tethered Vancomycin Shows no Antibiotic Resistance.** *Proceedings of the 24th Southern Biomedical Engineering Conference, April 18-20 2008, El Paso, TX.*
15. **Antoci V Jr.,** Adams CS, Parvizi J, Shapiro IM, Hickok NJ. **Vancomycin-engineered Implants Promote Bone Cell Proliferation and Differentiation.** *Proceedings of the 24th Southern Biomedical Engineering Conference, April 18-20 2008, El Paso, TX.*
16. **Antoci V Jr.,** Parvizi J, Adams CS, Shapiro IM, Freeman TA. **Ultrasound Speeds Fracture Healing by Increased COX-2, MMP-13, and Osteopontin Expression.** *Proceedings of the 24th Southern Biomedical Engineering Conference, April 18-20 2008, El Paso, TX.*
17. **Antoci V Jr.,** Voor MJ, Roberts CS, Antoci V. **Transfixion Wires Biomechanical Characteristics.** *Proceedings of the 24th Southern Biomedical Engineering Conference, April 18-20 2008, El Paso, TX.*
18. **Antoci V Jr.,** Voor MJ, Roberts CS, Antoci V. **Sagittal Stiffness of Proximal Tibia External Fixation and Transfixion Wire Positioning within the Bone.** *Proceedings of the 24th Southern Biomedical Engineering Conference, April 18-20 2008, El Paso, TX.*
19. **Antoci V Jr.,** Phillips MJ, Krackow KA, Antoci V. **A New Option for Treatment of Periprosthetic**
20. **Antoci V Jr.,** Voor MJ, Roberts CS, Antoci V. **The Adequate Wire Tension During External Fixation.** *Proceedings of the 24th Southern Biomedical Engineering Conference, April 18-20 2008, El Paso, TX.*
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23. **Antoci V Jr.,** Phillips MJ, Krockow KA, Antoci V. **A New Option for Treatment of Periprosthetic Infections After Total Knee Arthroplasty.** *Proceedings of the 24th Southern Biomedical Engineering Conference, April 18-20 2008, El Paso, TX.*
24. **Antoci V Jr.,** Ono C, Raney EM, Antoci V. **Deformity Correction in Children via Distraction Osteogenesis.** *Proceedings of the 24th Southern Biomedical Engineering Conference, April 18-20 2008, El Paso, TX.*
25. Freeman TA, **Antoci V Jr.,** Rozycka M, Adams CS, Shapiro IM, Parvizi J. **Ultrasound Produces Faster Fracture Healing by Increased COX-2, MMP-13, and OPN Expression .** *Proceeding of the 75th American Academy of Orthopaedic Surgery, March 5-8, 2008, San Francisco, California, USA.*
26. Freeman TA, Patel P, Parvizi J, Antoci V Jr., Shapiro IM, **Antoci V Jr.,** Rozycka M, Adams CS, Shapiro IM, Parvizi J. **A Novel MicroCT Method of Analysis Employing Multiple Thresholds: LIPUS Treatment Increases Bone Formation and Resorption during Fracture**

- Healing.***Proceedings of the 54nd Annual Meeting of the Orthopaedic Research Society, March 2-5, 2008, San Francisco, California, USA.*
26. **Antoci V Jr.,** Ketonis C, Adams C, Shapiro I, Parvizi J, Hickok NJ. **Nanoscale Vancomycin Implant Surface Fights S. aureus Colonization.** *Proceedings of the 6th Combined Meeting of the Orthopaedic Research Societies, October 20-24, 2007, Honolulu, Hawaii, USA.*
 27. Ketonis C, Ghanem E, **Antoci V Jr.,** Joshi R, Barrack R, Parvizi J. **Periprosthetic Infection: Where Do We Stand With Regard to Gram Stain?** *Proceedings of the 26th Annual meeting of European Bone and Joint Infection Society, September 20-22, 2007, Komeno, Corfu, Greece*
 28. Ghanem E, **Antoci V Jr.,** Sharkey PF, Barrack R, Spangehl M, Parvizi J. **Periprosthetic Infection: Threshold Values for ESR and CRP.** *Proceedings of the 26th Annual meeting of European Bone and Joint Infection Society, September 20-22, 2007, Komeno, Corfu, Greece*
 29. **Antoci V Jr.,** Ketonis C, Davidson H., Freeman T, Hickok NJ, Parvizi J. **Novel Antibiotic-modified Implant Inhibits Bacterial Attachment After Multiple Challenges.***Proceedings of the 17th Annual Open Annual Scientific Meeting of the Musculoskeletal Infection Society, Aug 10-11, 2007, San Diego, California, USA*
 30. Antoci V, Ono C, Antoci V Jr., Raney E. **The lengthening percentage predicts the complication rate and complexity during bone lengthening.** *Proceedings of the 74th Annual Meeting of the American Academy of Orthopaedic Surgeons, February 14-18, 2007, San Diego, CA, USA.*
 31. **Antoci V Jr.,** Radin S, Parvizi J, Ducheyne P. **Sol-gel delivered vancomycin prevents periprosthetic infection.***Proceedings of the Eastern Orthopaedic Association EOA and Southern Orthopaedic Association SOA Combined meeting, Victoria, British Columbia, Canada. August 1-4 2007. Winner of Founders Award, Eastern Orthopedic Association.*
 32. Antoci V, Ono C, **Antoci V Jr.,** Raney E. **Acquired Versus Congenital Limb Deficiency Correction In Children.***Transactions of the 37th Annual Meeting of the Eastern Orthopaedic Association, October 18-21, 2006, Boca Raton, Florida, USA.*
 33. **Antoci V Jr,** Adams CS, Parvizi J, King SB, Wickstrom E, Zeiger AR, Composto RJ, Ducheyne P, Shapiro IM, Hickok NJ. **Antibiotic Modified Implant Surface is Stable, Microbicidal, Osteocompatible.** *Transactions of the 37th Annual Meeting of the Eastern Orthopaedic Association, October 18-21, 2006, Boca Raton, FL, USA.*
 34. **Antoci V Jr.,** Adams CS, Freeman TA, Hickok NJ, Shapiro IM, Parvizi J. **Novel Rat Periprosthetic Infection Model Achieves Consistent Results.** *Transactions of the 37th Annual Meeting of the Eastern Orthopaedic Association, October 18-21, 2006, Boca Raton, FL, USA.*
 35. Raney E M, Ono C M, **Antoci V Jr.,** Antoci V. **Bone Lengthening in Children: Congenital Vs. Acquired Limb Length Discrepancy.** *Proceedings of the 70th Annual Meeting of the Western Orthopaedic Association, October 11-14, 2006, Santa Fe, New Mexico, USA.*
 36. Antoci V, Voor MJ, **Antoci V Jr.,** Roberts CS. **A change in transfixion crossed wire plane increases stiffness of external fixation.***Proceedings of the 2006 Combined Scientific Meeting of the Australian Orthopaedic Association and New Zealand Orthopaedic Association, October 8 – 13, 2006, Canberra, Australia.*
 37. **Antoci V Jr.,** King SB, Adams CS, Parvizi J, Composto RJ, Freeman TA, Wickstrom E, Zeiger AR, Ducheyne P, Shapiro IM, Hickok NJ. **Vancomycin Stably and Permanently Bonded to Implant Inhibits Bacterial Surface Colonization and Infection Development, Award Paper.** *Proceedings of the 19th Annual Symposium of the International Society for Technology in Arthroplasty (ISTA), October 6-9, 2006, New York City, NY, USA.*
 38. Antoci V, Phillips MJ, **Antoci V Jr.,** Krackow KA. **A Novel Technique in the Treatment of Infected Total Knee Arthroplasty.***Proceedings of the 19th Annual Symposium of the International Society for Technology in Arthroplasty (ISTA), October 6-9, 2006, New York City, NY, USA.*
 39. Antoci V, Voor MJ, **Antoci V Jr.,** Roberts CS. **Distal tibia external fixation: Biomechanical considerations.***Proceedings of the British Orthopaedic Association, September 27-29, 2006, Glasgow, United Kingdom.*
 40. **Antoci V Jr.,** Adams CS, Parvizi J, King SB, Wickstrom E, Zeiger AR, Composto RJ, Ducheyne P, Shapiro IM, Hickok NJ. **Covalently Attached Vancomycin Provides a Nanoscale Antibacterial Surface.** *Proceedings of the 16th Open Annual Scientific Meeting of the MusculoSkeletal Infection Society., Aug 11-12, 2006, Lake Tahoe, CA, USA*
 41. **Antoci V Jr.,** Adams CS, Hoffsommer HM, Binoy J, King SB, Freeman TA, Parvizi J, Shapiro IM, Hickok NJ. **Vancomycin-Modified Rods Inhibit Bacteria Despite Serum Coverage.** *Proceedings of*

the 16th Open Annual Scientific Meeting of the MusculoSkeletal Infection Society., Aug 11-12, 2006, Lake Tahoe, CA, USA

42. **Antoci V Jr.**, Parvizi J, Freeman TA, Hoffsommer HM, Wickstrom E, Zeiger AR, Shapiro IM, Hickok NJ, Adams CS. **Vancomycin-modified Surface Effective Against Peri-prosthetic infection.** *Proceedings of the 16th Open Annual Scientific Meeting of the MusculoSkeletal Infection Society., Aug 11-12, 2006, Lake Tahoe, CA, USA*
43. **Antoci V Jr.**, Adams CS, Freeman TA, Hickok NJ, Shapiro IM, Parvizi J. **A Rat Model of Prosthesis Associated Infection.** *Proceedings of the 16th Open Annual Scientific Meeting of the MusculoSkeletal Infection Society., Aug 11-12, 2006, Lake Tahoe, CA, USA*
44. **Antoci V Jr.**, Adams CS, Powell DK, Antoci V, Hickok NJ, Shapiro IM, Parvizi J. **Cytotoxicity as a Function of Antibiotic Concentration Released from Cement, Award Paper.** *Proceedings of the 16th Open Annual Scientific Meeting of the MusculoSkeletal Infection Society., Aug 11-12, 2006, Lake Tahoe, CA, USA*
45. Raney E M, Ono C M, **Antoci V Jr.**, Antoci V. **Bone Lengthening in Children: Congenital versus Acquired Deficiency.** *Proceedings of the Annual Meeting of the Pediatric Orthopaedic Society of North America, May 4-6, 2006, San Diego, CA, USA.*
46. **Antoci V Jr.**, King SB, Parvizi J, Adams CS, Jose B, Wickstrom E, Shapiro IM, and Hickok NJ. **Vancomycin Tethered to Ti Rods Prevents S. aureus Infection.** *Proceedings of the 73rd Annual Meeting of the American Academy of Orthopaedic Surgeons, March 22 – 26, 2006, Chicago, Illinois, USA.*
47. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **External fixation across the ankle.** *Proceedings of the 52nd Annual Meeting of the Orthopaedic Research Society, March 19-22, 2006, Chicago, Illinois, USA.*
48. **Antoci V Jr.**, Binoy J, King SB, Parvizi J, Zeiger AR, Shapiro IM, Adams CS., Wickstrom E, Hickok NJ. **Covalent Modification of Implants with Antibiotics: A New Paradigm.** *Proceedings of the 52nd Annual Meeting of the Orthopaedic Research Society, March 19-22, 2006, Chicago, Illinois, USA.*
49. **Antoci V Jr.**, King SB, Parvizi J, et al. **Vancomycin Tethered to Ti Prevents S. aureus Biofilm Formation.** *Transactions of the 37th Annual Meeting of the Eastern Orthopaedic Association, October 5-8, 2005, Cambridge, MD, USA.*
50. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **Transfixion wire number and levels of fixation of proximal tibia external fixation.** *Transactions of the 5th Combined Meeting of the Orthopaedic Research Societies of the Canada, USA, Japan and Europe, October 10-13, 2004, Banff, Alberta, Canada.*
51. **Antoci V Jr.**, Roberts CS, Voor MJ, Antoci V. **Mechanics of Transfixion Wire Tension on Ring and Hybrid External Fixation of the Proximal Tibia: A Biomechanical Study.** *The Proceedings of the Osteosynthese International Congress of Gerhard Kuntscher Kreis, September 11-13, 2003; Budapest, Hungary.*
52. Antoci V, Voor M., **Antoci V Jr.**, Seligson D., Roberts C.S. **Biomechanics of External Fixation of Distal Tibial Periarticular Fractures: Is Spanning the Ankle with a Foot Plate Desirable?** *The Proceedings of the Osteosynthese International Congress of Gerhard Kuntscher Kreis, September 11-13, 2003; Budapest, Hungary.*

SELECTED POSTER PRESENTATIONS

1. Cohen EM, Blazar I, Antoci V. **No Physical Therapy after Total Knee Arthroplasty.** *Proceedings of the 85th Annual Meeting of the American Academy of Orthopaedic Surgeons, March, 2018, New Orleans, USA.*
2. Cohen EM, Ritterman S, Vaughn J, Antoci V, Rubin L. **Intraoperative Femur Fracture Risk during Primary Anterior Approach Cementless Total Hip Arthroplasty with and without a Fracture Table.** *Proceedings of the 52nd Annual Meeting of the Orthopaedic Research Society, March 19-22, 2017, San Diego, CA, USA.*
3. **Antoci V Jr.**, Bedair H. **Line to Line Reaming of Porous Cups Improves Position and Reduces Variability in Acetabular Component Placement.** *Proceedings of the 83rd Annual Meeting of the American Academy of Orthopaedic Surgeons, March 1-6, 2016, Chicago, Illinois, USA. Poster 97.*
4. Dimitriou D, Dion N, **Antoci V Jr.**, Tsai TY, Li G, Rubash H, Freiberg A, Kwon YM. **Is Ultrasound**

- as Useful as MARS MRI in the Longitudinal Surveillance of Metal-on-Metal Hip Patients?**
 Proceedings of the 83th Annual Meeting of the American Academy of Orthopaedic Surgeons,
 March 1-5, 2016, Orlando, FL, USA.
5. Dion N, **Antoci V Jr**, Freiberg A, Kwon YM. **Is Ultrasound As Useful As MARS MRI in the Longitudinal Surveillance of Metal-on-Metal Hip Patients?***Proceedings of the 83rd Annual Meeting of the American Academy of Orthopaedic Surgeons, March 1-6, 2016, Chicago, Illinois, USA.* Poster.
 6. Ketonis C, **Antoci V Jr**, Aiyer A, Adams C, Shapiro IM, Parvizi J, Hickok NJ. **Modification of Ti alloy surfaces: retention of topography with attachment of active antibiotics.** Proceedings of the 54th Annual Meeting of the Orthopaedic Research Society, March 2-5, 2008, San Francisco, California, USA.
 7. Aiyer A, **Antoci V Jr**, Ketonis C, Ducheyne P, Adams C, Shapiro IM, Hickok NJ, Parvizi J. **A nanoscale, antibiotic modified titanium surface does not foster the emergence of resistance in S. epidermidis.** Proceedings of the 54th Annual Meeting of the Orthopaedic Research Society, March 2-5, 2008, San Francisco, California, USA.
 8. **Antoci V Jr**, Ketonis C, Adams C, Parvizi J, Freeman T, Shapiro IM, Hickok NJ. **Vancomycin-Implant Inhibits Bacteria But Not Musculoskeletal Cell Attachment and Maturation.** Proceedings of the 54th Annual Meeting of the Orthopaedic Research Society, March 2-5, 2008, San Francisco, California, USA.
 9. **Antoci V Jr**, Parvizi J, Ketonis C, Adams C, Shapiro IM, Hickok NJ. **Antibiotic Implant Shows Multifaceted Effects.** Proceedings of the 6th Combined Meeting of the Orthopaedic Research Societies, October 20-24, 2007, Honolulu, Hawaii, USA.
 10. Ketonis C, **Antoci V Jr.**, Davidson H, Ghanem E, Hickok NJ, Shapiro IM, Adams CS, Parvizi J. **Novel Rat Model for Periprosthetic Infection around a Long Bone Fracture.** Proceedings of the 17th Annual Open Annual Scientific Meeting of the Musculoskeletal Infection Society (MSIS), Aug 10-11, 2007, San Diego, California, USA
 11. Ketonis C, Ghanem E, **Antoci V Jr.**, Joshi R, Barrack R, Parvizi J. **Periprosthetic Infection: Where Do We Stand With Regard to Gram Stain?** Proceedings of the 17th Annual Open Annual Scientific Meeting of the Musculoskeletal Infection Society (MSIS), Aug 10-11, 2007, San Diego, California, USA
 12. Radin S, **Antoci V Jr.**, Hickok N, Adams CS, Parvizi J, Shapiro I, Ducheyne P. Controlled Release of Antibiotics and Bactericidal Effect of Thin Sol-Gel Film on Metallic Implant Device. Society For Biomaterials Annual Meeting, Chicago, IL, April 18-21, 2007.
 13. Ketonis C, **Antoci V Jr.**, Parvizi J, Liu Y., Composto R, Hickok NJ. **A new generation of orthopedic implants that protect themselves from infection.** Thomas Jefferson University Chapter Sigma Xi Student Research Day, April 12, 2007, Philadelphia, Pennsylvania, USA
 14. **Antoci V Jr.**, Adams CS, Powell DK, Ketonis C, Antoci V, Hickok NJ, Shapiro IM, Parvizi J. **High Dose Common Antibiotics Inhibit Cellular Proliferation.** Proceedings of the 53rd Annual Meeting of the Orthopaedic Research Society, March 19-22, 2007, San Diego, California, USA
 15. Antoci V, Ono C, **Antoci V Jr.**, Raney E. **Does the pin tract infection affect the outcomes of distraction osteogenesis in children?** Transactions of the 37th Annual Meeting of the Eastern Orthopaedic Association, October 18-21, 2006, Boca Raton, Florida, USA.
 16. **Antoci V Jr**, Adams CS, Parvizi J, King SB, Wickstrom E, Zeiger AR, Composto RJ, Ducheyne P, Shapiro IM, Hickok NJ. **Covalently Attached Vancomycin in Engineering a New Implant with Antibacterial Properties.** *Proceedings of the 44th Annual Meeting of the Infectious Disease Society of America (IDSA), October 12-15, 2006, Toronto, Ontario, Canada.*
 17. **Antoci V Jr.**, Adams CS, Powell DK, Antoci V, Hickok NJ, Shapiro IM, Parvizi J. **Antibiotic Cytotoxicity to Osteoblasts and Chondrocytes.** *Proceedings of the 44th Annual Meeting of the Infectious Disease Society of America (IDSA), October 12-15, 2006, Toronto, Ontario, Canada.*
 18. **Antoci V Jr.**, Adams CS, Powell DK, Antoci V, Hickok NJ, Shapiro IM, Parvizi J. **Where is the Balance for Antibiotic Concentration in Methylmethacrylate Cement?** *Proceedings of the 19th Annual Symposium of the International Society for Technology in Arthroplasty (ISTA), October 6-9, 2006, New York City, NY, USA.*
 19. **Antoci V Jr.**, Adams CS, Parvizi J., King SB, Wickstrom E, Zeiger AR, Composto RJ, Ducheyne P, Shapiro IM, Hickok NJ. **Antibiotics Intrinsic to Implants Provide Hope.** *Proceedings of the*

- 19th Annual Symposium of the International Society for Technology in Arthroplasty (ISTA), October 6-9, 2006, New York City, NY, USA.*
20. **Antoci V Jr.**, Adams CS, Hoffsommer HM, Jose B, King SB, Freeman TA, Parvizi J, Shapiro IM, Wickstrom E, Hickok NJ. **Vancomycin-modified Rods Inhibit Bacteria Even after Serum Coating.** *Proceedings of the 19th Annual Symposium of the International Society for Technology in Arthroplasty (ISTA), October 6-9, 2006, New York City, NY, USA.*
 21. **Antoci V Jr.**, Parvizi J, Freeman TA, Hoffsommer HM, Wickstrom E, Zeiger AR, Shapiro IM, Hickok NJ, Adams CS. **Vancomycin-modified Implant Inhibits Bacterial Surface Colonization and Infection Development.** *Proceedings of the 19th Annual Symposium of the International Society for Technology in Arthroplasty (ISTA), October 6-9, 2006, New York City, NY, USA.*
 22. **Antoci V Jr.**, Adams CS, Freeman TA, Hickok NJ, Shapiro IM, Parvizi J. **Periprosthetic Infection Model in Rats.** *Proceedings of the 19th Annual Symposium of the International Society for Technology in Arthroplasty (ISTA), October 6-9, 2006, New York City, NY, USA.*
 23. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **Transfixion Wires Variables.** *Proceedings of the 22nd Annual Meeting of the Orthopaedic Trauma Association, October 5-7, 2006, Phoenix, Arizona, USA.*
 24. Antoci V, Ono C, **Antoci V Jr.**, Raney E. **Pin Tract Infection during Limb Lengthening in Children with Posttraumatic Deficiency.** *Proceedings of the 22nd Annual Meeting of the Orthopaedic Trauma Association, October 5-7, 2006, Phoenix, Arizona, USA.*
 25. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **Sagittal stiffness of proximal tibia external fixation and transfixion wire positioning within the bone.** *Proceedings of the British Orthopaedic Association, September 27-29, 2006, Glasgow, United Kingdom.*
 26. **Antoci V Jr.**, Hickok NJ, Parvizi J, Freeman TA, Composto RJ, Saunders R, Zeiger AR, Wickstrom E, Ducheyne P, Shapiro IM, Adams CS. **Antibiotic Integral to Implant Surface Inhibits Bacterial, but not Osteoblast Colonization.** *Proceedings of the 28th Annual Meeting of American Society of Bone and Mineral Research (ASBMR), September 16-19, 2006, Philadelphia, PA, USA.*
 27. **Antoci V Jr.**, Hickok NJ, Adams CS, Parvizi J, Wickstrom E, Zeiger AR, Composto RJ, Ducheyne P, Shapiro IM. Smart Substrates for a New Generation of Implants. *NIH Bioengineering Consortium 6th Annual Bioengineering Research Partnership Annual Meeting.* July, 2006. Bethesda, MD, USA
 28. Raney E, Ono C, **Antoci V Jr.**, Antoci V. **Bone Lengthening in Children: Congenital versus Acquired Limb Length Discrepancy.** *Proceedings of the 119th American Orthopaedic Association Annual Meeting, June 21-24, 2006, San Antonio, TX, USA.*
 29. **Antoci V Jr.**, Adams CS, Powell DK, Antoci V, Hickok NJ, Shapiro IM, Parvizi J. **High Dose Common Antibiotics Inhibit Cellular Proliferation.** *Proceedings of the 52nd Annual Meeting of the Orthopaedic Research Society, March 19-22, 2006, Chicago, Illinois, USA.*
 30. Antoci V, Ono C, **Antoci V Jr.**, Raney E. **Congenital versus Acquired Limb Lengthening in Children.** *Proceedings of the 73rd Annual Meeting of the American Academy of Orthopaedic Surgeons, March 22 – 26, 2006, Chicago, Illinois, USA.* Poster 254. AAOS Best Poster Paper Award.
 31. Parvizi J, **Antoci V Jr.**, King SB, Jose B, Hickok NJ, Wickstrom E, Shapiro IM, Adams CS. **Vancomycin Covalently Bonded to Titanium Alloy Prevents *S. aureus* Colonization.** *Proceedings of the 52nd Annual Meeting of the Orthopaedic Research Society, March 19-22, 2006, Chicago, Illinois, USA.*
 32. Adams CS, **Antoci V Jr.**, Hoffsommer HM, Jose B, King SB, Freeman TA, Parvizi J, Shapiro IM, Wickstrom E, Hickok NJ. **Serum-coated Vancomycin-modified Ti Prevents *S. epidermidis* Biofilm Formation.** *Proceedings of the 52nd Annual Meeting of the Orthopaedic Research Society, March 19-22, 2006, Chicago, Illinois, USA.*
 33. Hickok NJ, Powell DK, **Antoci V Jr.**, Jose B, Parvizi J, Zeiger AR, Shapiro IM, Wickstrom E, Adams CS. **Delivery of Doxorubicin by Titanium Implants.** *Proceedings of the 52nd Annual Meeting of the Orthopaedic Research Society, March 19-22, 2006, Chicago, Illinois, USA.*
 34. Freeman TA, Antoci V Jr, Rozycka M, Adams CS, Shapiro IM, Parvizi J. **Low Intensity Ultrasound Affects MMP-13, Osteopontin and COX-2 Protein Expression: an in vivo study.** *Proceedings of the 52nd Annual Meeting of the Orthopaedic Research Society, March 19-22, 2006, Chicago, Illinois, USA.*

35. Antoci V, Raney E, Voor, MJ, **Antoci V Jr**, Roberts CS. **Fine wire tensioners.** *Transactions of the 36th Annual Meeting of the Eastern Orthopaedic Association, October 5-8, 2005, Cambridge, MD, USA.*
36. Antoci, V; Raney, E; Voor, MJ; **Antoci Jr, V**; Roberts, CS. **Levels of external fixation and wire number at these levels.** *Transactions of the 36th Annual Meeting of the Eastern Orthopaedic Association, October 5-8, 2005, Cambridge, MD, USA.*
37. Antoci, V; Raney, E; Voor, MJ; **Antoci Jr, V**; Roberts, CS. **Biomechanical characteristics of olive wires.***Transactions of the 36th Annual Meeting of the Eastern Orthopaedic Association, October 5-8, 2005, Cambridge, MD, USA.*
38. Antoci, V; Raney, E; Voor, MJ; **Antoci Jr, V**; Roberts, CS. **Biomechanical considerations in using ankle spanning external fixation.** *Transactions of the 36th Annual Meeting of the Eastern Orthopaedic Association, October 5-8, 2005, Cambridge, MD, USA.*
39. Antoci, V; Raney, E; Voor, MJ; **Antoci Jr, V**; Roberts, CS. **Crossed wire plane to bone fragment axis and stiffness of external fixation.** *Transactions of the 36th Annual Meeting of the Eastern Orthopaedic Association, October 5-8, 2005, Cambridge, MD, USA.*
40. Antoci, V; Raney, E; Voor, MJ; **Antoci Jr, V**; Roberts, CS. **Adequate wire positioning within proximal tibia increases sagittal stiffness of external fixation.***Transactions of the 36th Annual Meeting of the Eastern Orthopaedic Association, October 5-8, 2005, Cambridge, MD, USA.*
41. Antoci, V; Raney, E; Voor, MJ; **Antoci Jr, V**; Roberts, CS. **Biomechanics of transfixion wire crossing angle.***Transactions of the 36th Annual Meeting of the Eastern Orthopaedic Association, October 5-8, 2005, Cambridge, MD, USA.*
42. **Antoci V Jr.**, King SB, Binoy J, Hickok NJ, Wickstrom E, Zeiger AR, Shapiro IM, Parvizi J, Adams CS. **Vancomycin covalently bound to Ti6Al4V surfaces eradicates bacterial colonization.** *Proceedings of the 27th Annual Meeting of American Society of Bone and Mineral Research (ASBMR), September 22-27, 2005, Memphis, TN, USA.*
43. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **Wire crossing angle – a biomechanical variable of fine wire external fixation.** *Transactions of the 51st Annual Meeting of the Orthopaedic Research Society, February 20 - 23, 2005, Washington, D.C., USA.*
44. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **The influence of wire design, olive wire positioning and tensioning characteristics on the stiffness of external fixation: a biomechanical study.***Transactions of the 51st Annual Meeting of the Orthopaedic Research Society, February 20 - 23, 2005, Washington, D.C., USA.*
45. **Antoci Jr. V**, Roberts CS , Voor MJ, Antoci V. **Biomechanical effect of transfixion wire tension on the stiffness of fine wire external fixation.** *Transactions of the 51st Annual Meeting of the Orthopaedic Research Society, February 20 - 23, 2005, Washington, D.C., USA.*
46. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **The effect of the relationship between the crossed wire pane and the bone fragment mechanical axis on the stiffness of external fixation.** *Transactions of the 51st Annual Meeting of the Orthopaedic Research Society, February 20 - 23, 2005, Washington, D.C., USA.*
47. Antoci V, Raney E, Voor MJ, **Antoci Jr V**, Roberts CS. **The implication of the foot plate in distal tibia external fixation.***Proceedings of the 1th Annual International POSNA/AAOS Pediatric Orthopaedic Symposium, December 1-5, 2004, Orlando, FL, USA.*
48. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **The Effect of Transfixion Wire Number and Spacing between Two Levels of Fixation on the Stiffness of Tibia External Fixation.***Proceedings of the 9th Conference of the International Society for Fracture Repair, November 2-6, 2004, Bologna, Italy.*
49. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **The effect of transfixion wires positioning within the bone on the stiffness of proximal tibia external fixation: a biomechanical study.***Proceedings of the 9th Conference of the International Society for Fracture Repair, November 2-6, 2004, Bologna, Italy.*
50. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **Ankle-Spanning External Fixation of Distal Tibia Periarticular Fractures.***Proceedings of the 9th Conference of the International Society for Fracture Repair, November 2-6, 2004, Bologna, Italy.*
51. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **The influence of wire design, olive wire positioning and tensioning characteristics on the stiffness of external fixation: a biomechanical study.**

- Transactions of the 5th Combined Meeting of the Orthopaedic Research Societies of the Canada, USA, Japan and Europe, October 10-13, 2004, Banff, Alberta, Canada.*
52. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **Biomechanical effect of transfixion wire tension on the stiffness of fine wire external fixation.** *Transactions of the 5th Combined Meeting of the Orthopaedic Research Societies of the Canada, USA, Japan and Europe, October 10-13, 2004, Banff, Alberta, Canada.*
 53. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **External fixation of distal tibia periarticular fractures: a biomechanical study.** *Transactions of the 5th Combined Meeting of the Orthopaedic Research Societies of the Canada, USA, Japan and Europe, October 10-13, 2004, Banff, Alberta, Canada.*
 54. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **Transfixion wire positioning within proximal tibia during external fixation.** *Transactions of the 5th Combined Meeting of the Orthopaedic Research Societies of the Canada, USA, Japan and Europe, October 10-13, 2004, Banff, Alberta, Canada.*
 55. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **The effect of the relationship between the crossed wire pane and the bone fragment mechanical axis on the stiffness of external fixation.** *Transactions of the 5th Combined Meeting of the Orthopaedic Research Societies of the Canada, USA, Japan and Europe, October 10-13, 2004, Banff, Alberta, Canada.*
 56. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **Wire crossing angle – a biomechanical variable of fine wire external fixation.** *Transactions of the 5th Combined Meeting of the Orthopaedic Research Societies of the Canada, USA, Japan and Europe, October 10-13, 2004, Banff, Alberta, Canada.*
 57. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **Biomechanics of External Fixation of Distal Tibial Periarticular Fractures.** *Proceedings of the 20th Annual Meeting of the Orthopaedic Trauma Association, October 8-10, 2004, Ft. Lauderdale/Hollywood, Florida, USA.*
 58. Roberts CS, Antoci V, **Antoci V Jr.**, Voor MJ. **The accuracy of fine wire tensioners for hybrid and ring external fixation.** *Proceedings of the 71st Annual Meeting of the American Academy of Orthopaedic Surgeons, March 10-14, 2004, San Francisco, California, USA.*
 59. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **Biomechanics of External Fixation of Distal Tibial Extra-articular and Intra-articular Fractures: Is Spanning the Ankle with a Foot Plate Beneficial?** *Transactions of the 50th Annual Meeting of the Orthopaedic Research Society, March 7-10, 2004, San Francisco, California, USA.*
 60. Antoci V, Voor MJ, **Antoci V Jr.**, Roberts CS. **The accuracy of fine wire tensioners.** *Transactions of the 50th Annual Meeting of the Orthopaedic Research Society, March 7-10, 2004, San Francisco, California, USA.*

SCHOLARLY WORK PUBLISHED IN OTHER MEDIA

1. Antoci V. **Cold weather and achy joints.** John DePetro Show. WPRO Radio. Rhode Island. 1130AM. January 18, 2016
2. **Building Relationships at Jefferson: Student Mentoring.** Discoveries. Philadelphia, PA. August 2007.
3. **Creating a permanent chemical bond between antibiotics and titanium, a material used in orthopaedic implants.** *Medical News Today.* East Sussex, United Kingdom: Sep 25, 2005.
4. **Jefferson Scientists Design Method to Fight Artificial Implant Infections with Antibiotics.** *Science Daily.* Chevy Chase, MD: Sep 23, 2005.
5. **Medical Implants May Soon Be Infection Resistant.** *Daily News Central.* Las Vegas, NV: Sep 23, 2005

UNIVERSITY TEACHING ROLES

Graduate Faculty Advisor: Alexis Fairman, Master of Science candidate, graduating Spring 2020
 - Thesis advisor and primary investigator, mentoring Alexis through her bioengineering curriculum, associated research development, and ultimate production of her graduate thesis

Course mentor: Doctoring II and III
 Alpert Medical School, Brown University, Providence RI

Spring 2019/Fall 2019

- Directly mentored medical students by weekly half a day direct interaction and teaching of patient interviewing, physical exam, under both simulated and clinical scenarios. Directed students to interview real patients, helped organize their clinical presentation, and develop clinical judgement on diagnosis and differential.

Course Organizer and Lecturer: Orthopedic Basic Science, Fall 2018/Spring 2019

Brown Orthopedic Residency Program, Brown University, Providence RI

- Assisted Dr. Roy Aaron in organizing and lecturing on multiple topics on orthopedic basic science including infection, joint reconstruction, lower extremity anatomy, osteolysis, and other topics of interest. Organized and presented monthly lectures over the course of the curriculum allowing for teaching and testing basic knowledge.

Graduate Faculty Advisor/Defense Committee: Adam Eltorai, PhD candidate, defended 2018

- Directly mentored graduate student through his research plan and development, acting as member of his defense committee, and ultimate production of multiple successful publication and PhD thesis

Faculty Advisor: Robert Kim, Bioengineering Honors Program, Spring 2016

- Directly mentored student through his research plan and development, acting as member of his defense committee, and ultimate production of multiple successful publication and thesis

Course leader: Biology 1950 Bioengineering Directed Research Fall 2015/Spring 2016

Brown University, Providence, RI

- Directly mentored and taught 2 years the foundations of clinical research through weekly one hour interactions with students along the way, involving the aspects of clinical translational medicine, research development, critical thinking, as well as producing a thesis with associated end of year presentation.

Fellowship Curriculum Organizer: Brown Adult Reconstruction Fellowship, 2016

- Organized entire fellowship curriculum, including lecture and reading material, guidelines and milestones, scheduling, and assessment resources, coordinated with the Graduate Medical Education Office for approval and guidance.

Course Director: Annual Brown Orthopedic Symposium, Current Topics in Lower Extremity

Orthopedics, 11/18/2017

- Organized the course curriculum, invited faculty lectures, and opportunities for hands-on education and training for community primary care, orthopedic practitioners, physical therapy, and chiropractors. 10 hours of continuing medical education (CME) awarded. 72 participants

Course Organizer: Pediatric and Adolescent Sport Medicine November 2016

- Helped organize the course curriculum, invited faculty lectures, and opportunities for hands-on education and training for community primary care, orthopedic practitioners, physical therapy, and chiropractors. 10 hours of continuing medical education (CME) awarded. 37 participants

Course Organizer: Current Topics in Active Adult Hip and Knee Orthopedics 11/21/2015

- Helped organize the course curriculum, invited faculty lectures, and opportunities for hands-on education and training for community primary care, orthopedic practitioners, physical therapy, and chiropractors. 10 hours of continuing medical education (CME) awarded. 103 participants

HOSPITAL TEACHING ROLES

Lecturer: Orthopedic Research Development and Future Directions. 4/22/2019

Stryker Orthopedic Institute, Mahwah, NJ

- Invited lecturer to discuss active issues in lower extremity orthopedic research and future directions as well as opportunities for interactions with industry.

Honors Thesis: Grace Plassache, "Marine Biomimetic Drug Prototypes" 4/16/2019

- Helped organized, review and edit the Honors Thesis and presentation associated with graduate student research

Lecturer: Revision total knee arthroplasty 1/17/2019

- Invited lecturer to teach basic background on clinical problems in knee revision arthroplasty to the Department of Orthopedic Surgery. 11 participants

Grand Rounds Speaker: Engineering Smart Implants in Orthopedics. 2/3/2017

- Invited lecturer to teach basic background on clinical problems in orthopedic implant development and research to the Department of Orthopedic Surgery. 63 participants

Lecturer: Orthopedic In-training examination – how to beat it 9/23/2018

- Invited lecturer to teach basic background on clinical problems in orthopedic teaching to the Department of Orthopedic Surgery. 21 participants

Honors Thesis: Soobin Wang “Polyelectrolyte Multilayer Films” 8/3/2018

- Directly mentored and assisted with research design and development, and ultimate production of multiple successful publications and thesis

Honors Thesis: Douglas Barber “Developing an In Vitro Model for Visualizing and Classifying Biofilms” Brown University, Providence, RI 4/3/18

- Helped organized, review and edit the Honors Thesis and presentation associated with graduate student research

Lecturer: Examination of the Hip. Department of Internal Medicine 3/20/2017

- Invited lecturer to teach basic examination of the hip and associated pathologies to the Department of Internal Medicine. 23 participants

Lecturer: Medical Honoree Lecture, Arthritis Foundation 1/18/2017

- Invited lecturer to discuss the basic issues in current arthritis research and future directions, community involvement, and scientific-clinical interactions. 14 participants

Lecturer: Osteomyelitis and Orthopedic Infections 11/16/2016

- Invited lecturer to teach basic background on clinical problems in orthopedic infections to the Department of Orthopedic Surgery. 31 participants

Lecturer: Physical Orthopedic Examination of the Lower Extremity 11/19/2016

- Invited lecturer to teach basic examination of the lower extremities and associated pathologies to the Department of Internal Medicine. 17 participants

Lecturer: Examination of the Knee. Department of Internal Medicine 10/31/2015

- Invited lecturer to teach basic examination of the lower extremities and associated pathologies to the Department of Internal Medicine. 21 participants

Chief Resident, Massachusetts General Hospital, Boston, MA 2015

Orthopaedic In-training Review Curriculum, Organizer and Lecturer,
Harvard Combined Orthopaedic Residency Program 2015

PERSONAL INFORMATION