

Robert Douglas Zura, MD

**CURRICULUM VITAE**

 **Date Prepared:** February 17, 2021

**Primary academic appointment:** Department of Orthopaedic Surgery

**Present academic rank and title:** Professor and Chair

**Date of first LSU faculty appointment:** January 5, 2016

**Medical licensure:**

**Louisiana License** #300724

Date of Licensure December 11, 2015

**North Carolina License** #200400787

Inactive as of 8/25/2016

**Specialty certification(s) and dates :** American Board of Orthopaedic Surgery July 11, 2003

Recertification: 2013

**Date of birth:** March 26, 1968 **Place:** Washington, D.C.

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| --- | --- | --- | --- |
| **Education:** | **Institution** | **Date (Year)** | **Degree** |
| **High School** | Gilman  | 1986  | Diploma |
| **Undergraduate** | University of Virginia | 1990 | B.A. |
| **Graduate School** | Johns Hopkins School of Medicine | 1994 | M.D. |

**Professional training and academic career**

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| --- | --- | --- |
| **Institution** | **Position/Title** | **Dates** |
| University of Virginia | Intern Surgery | 1994-1995 |
| University of Virginia | Resident Orthopaedics | 1995-1999 |
| University of Virginia | Chief Resident Orthopaedics  | 1999-2000 |
| Carolinas Medical Center | Orthopaedic Trauma Fellow | 2000-2001 |
| Medical College of Georgia | Assistant Professor | 2001-2003 |
| Orthopaedic Specialty Clinic/Mary Washington Hospital | Private Practice | 2003-2004 |
| Duke University Medical Center | Assistant Professor | 2004-2012 |
|  | Associate Professor | 2/1/12-12/31/2015 |
|  | Tenure | 10/1/12- 12/31/2015 |

Lousiana State University Professor and Chair 1/5/16- present

**Scholarly societies**

Alpha Omega Alpha 1997

**Publications:**

 **Refereed journals:**

1. Devlin PM, Hwang JC-S, Winchell CJ, Day SG, **Zura RD**, and Edlich RF: Automated Hydrotherapy Pool Water Treatment System. *J Burn Care & Rehab* 10:74-78, 1989.
2. **Zura RD**, Groschel DHM, Becker DG, Hwang JC-S, and Edlich RF: Is There a Need for State Health Department Sanitary Codes for Public Hydrotherapy and Swimming Pools? *J Burn Care & Rehab* 11:146-150, 1990.
3. Tanner RW, **Zura RD**, Chen VT, Gregory PC, Becker DG, Thacker JG, and Edlich RF: A System for Adaptive Transportation. *J Burn Care & Rehab* 11:543-551, 1990.
4. Redd JL, **Zura RD**, Tanner AW, Walk EE, WU MM, and Edlich RF: Personal Emergency Response Systems. *J Burn Care & Rehab* 13:453-459, 1992.
5. Ruhl CM, Urbaniac JH, Foresman PA, Cox MJ, Rodeheaver GT, **Zura RD**, and Edlich RF: A New Hazard of Cornstarch, an Absorbable Dusting Powder. *J Emerg Med* 12:11-14, 1994.
6. Cox MJ, Bromberg WJ, **Zura RD**, Foresman PA, Morgan RG, and Edlich RF: New Advances in Electronic Devices for Hole Detection. *J Appl Biomat* 5:257-264, 1994.
7. Kahler DM and **Zura RD**: Evaluation of a Computer Integrated Surgical Technique for Percutaneous Fixation of Transverse Acetabular Fractures. *Lecture Notes Comput. Sci.,* 1205: 565-572, 1997.
8. **Zura RD**, Minasi JS, and Kahler DM: Tumor-induced Osteomalacia and Symptomatic Looser Zones Secondary to Mesenchymal Chondrosarcoma. *Journal of Surgical Oncology*. 71(1):58-62, May 1999.
9. **Zura RD** and Kahler DM: A Transverse Acetabular Nonunion Treated with Computer-Assisted Percutaneous Internal Fixation a Case Report*. JBJS*, 82-A: 219-224, 2000.
10. Miller CW and **Zura RD**: Closed Reduction of a Dislocation of a Constrained Acetabular Component. *Journal of Arthroplasty* 16(4): 504-5, 2001.
11. Chang JK, Gill SS, **Zura RD**, Krause WR, and Wang GJ: Comparative Strength of Three Methods of Fixation of Transverse Acetabular Fractures. *CORR* 392: 433-41, Nov. 2001.
12. **Zura RD** and Bosse MJ: Current Management of Gunshot Wounds to the Hip and Pelvis. *CORR* 408:110-114, March 2003.
13. Edwards BT, Leach PB, **Zura RD**, Corpe RS, and Young TR: Presentation of Gamma-Irradiated in Air Polyethylene Wear in the Form of a Synovial Cyst. *Journal of Long-Term Effects of Medical Implants* 13(5): 413-7, 2003.
14. Edwards BT, **Zura RD**, Bertrand S, Leonard S and Pellett J: Treatment of Neuromuscular Scoliosis with Posterior Spinal Fusion Using the Galveston Technique: A Retrospective Review and Results of 62 Patients. *Journal of Long-Term Effects of Medical Implants* 13(6): 437-44, 2003.
15. Peindl RD, **Zura RD**, Vincent AS, Coley ER, Bosse MJ, and Sims SH: Unstable Proximal Extra-Articular Tibia Fractures: A Biomechanical Evaluation of Four Methods of Fixation. *JOT* 18(8):540-545, September 2004.
16. Richard F. Edlich, MD, PhD, Mary Anne Hudson, RN, BSN, Ralph M. Buschbacher, MD, Kathryne L. Winters, L. D. Britt, MD, MPH, FACS, Mary Jude Cox, MD, Daniel G. Becker, MD, FACS, Joseph K. McLaughlin, Ph.D., K. Dean Gubler, DO, MPH, Thomas S. P. Zomerschoe, RPT, Mary F. Latimer, CPMSC, CPCS, **Robert D. Zura, MD**, Nona S. Paulsen, CMA, William B. Long III, MD, Barbara M. Brodie, PhD, RN, Susan Berenson RN, BSN, MSN, Scott E. Langenburg, MD, FACS, Lise Borel, DMD, Danielle B. Jenson, Dillon E. Chang, MD, W. Randolph Chitwood, Jr., MD, Thomas H. Roberts, Esq., Mara J. Martin, BS, RN, Anna Miller, RN, BSN, Charles L. Werner, Peyton T. Taylor, Jr., M.D., Jeanette Lancaster, PhD, NR, FAAN, Marina S. Kurian, MD, Jerry L. Falwell, Jr: Devastating Injuries in Healthcare Workers: Description of the Crisis and Legislative Solution to the Epidemic of Back Injury from Patient Lifting. *Journal of Long-Term Effects of Medical Implants* 15(2): 225-242, 2005.
17. Simovitch RW, Radkowski CA, **Zura RD**: Intramedullary Fixation of Fibular Fractures with Flexible Titanium Elastic Nails: Surgical Technique and a Case Report. *Journal of Long-Term Effects of Medical Implants*, Vol 16: 175-178, 2006.
18. Radkowski CA, Simovitch RW, **Zura RD**: Manufacturing Imperfection of a Locking Plate Screw Hole: A Case Report. *Journal of Long-Term Effects of Medical Implants*, Vol 16:179-184, 2006.
19. **Zura RD**, Browne JA: Current Concepts In Locked Plating. *Journal of Surgical Orthopaedic Advances*, Vol 15(3): 173-176, 2006.
20. **Zura RD**, Sasser B, Sabesan V, Pietrobon R, Tucker MC, Olson SA: A Survey of Orthopaedic Traumatologists Concerning the Use of Bone Growth Stimulators. *Journal of Surgical Orthopaedic Advances*, Vol 16(1): 1-4, 2007.
21. **Zura RD**, Browne JA, Black MD, Olson SA. “Current management of high-energy tibial plateau fractures”. *Current Orthopaedics*, Vol 21 (3): 229-235, 2007.
22. [Hembree WC](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Hembree%20WC%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [Ward BD](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Ward%20BD%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [Furman BD](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Furman%20BD%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [**Zura RD**](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Zura%20RD%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [Nichols LA](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Nichols%20LA%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [Guilak F](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Guilak%20F%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [Olson SA](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Olson%20SA%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract): “Viability and apoptosis of human chondrocytes in osteochondral fragments following joint trauma”. *Journal of Bone and Joint Surgery* – BR Vol 89 (10):1388-95, 2007.
23. **Zura RD**, Adams SB, Mata BA, Pietrobon R, Olson SA: “Does knee position at the time of tourniquet inflation affect knee range of motion?” *Journal of Surgical Orthopaedic Advances*, Vol 16 (4): 171-173, 2007.
24. Marchant MH, **Zura RD**, Urbaniak JR, Aldridge III JM: “Hip incision planning for free vascularized fibular grafting of the proximal femur: A handy tip”. *Journal of Surgical Orthopaedic Advances,* Vol 16 (4): 204-206, 2007.
25. Adams SB Jr., Radkowski CA, **Zura RD**, Moorman CT III. Complete quadriceps tendon rupture with concomitant tears of the anterior cruciate ligament and lateral meniscus. *Orthopaedics.* 2008;31(1):88.
26. **Brad Petrisor**, **Kyle Jeray**, **Emil Schemitsch**, **Beate Hanson**, **Sheila Sprague**, **David Sanders** and **Mohit Bhandari** for **the FLOW Investigators**: “Fluid lavage in patients with open fracture wounds (FLOW): an international survey of 984 surgeons”, BMC Musculoskeletal Disorders **9:**7, 2008. Collaborator
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28. Cannada LK, Viehe T, Cates CA, Norris RJ, **Zura RD**, Dedmond B, Obremskey W, Bosse M, and the Southeastern Fracture Consortium. “A Retrospective review of high-energy femoral neck-shaft fractures.” *J Orthop Trauma*, Vol 23, 254-260, 2009.
29. [Stabler TV](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Stabler%20TV%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [Byers SS](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Byers%20SS%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [**Zura RD**](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Zura%20RD%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [Kraus VB](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Kraus%20VB%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract). “Amino acid racemization reveals differential protein turnover in osteoarthritic articular and meniscal cartilages.” *Arthritis Res Ther.* 2009 Mar 6;11(2):R34.
30. Richard F. Edlich MD, PhD, William B. Long III MD, Dean Gubler DO, MPH,George T. Rodeheaver PhD, John G. Thacker PhD, Lise Borel DMD, Margot E. Chase , Catherine L. Cross, Allyson L. Fisher , Kant Y. Lin MD, Mary J. Cox MD, **Robert D. Zura MD**: “Citizen's Petition to Food and Drug Administration to ban cornstarch powder on medical gloves: Maltese cross birefringence.” *American Journal of Emergency Medicine* 27, 227–235, 2009.
31. Catterall JB, Barr D, Bolognesi M, **Zura RD**, Kraus VB:“Post-translational aging of proteins in osteoarthritic cartilage and synovial fluid as measured by isomerized aspartate.” *Arthritis Res Ther* 11(2):R55. Epub 2009 Apr 16.
32. Edlich RF, Long WB 3rd, Gubler DK, Rodeheaver GT, Thacker JG, Borel L, Chase ME, Fisher AL, Manson SS, Lin KY, Cox MJ, **Zura RD**: “Dangers of Cornstarch Powder on Medical Gloves – Seeking a Solution.” *Annals of Plastic Surgery* 63, 1, July 2009.
33. [Karanicolas PJ](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Karanicolas%20PJ%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [Bhandari M](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Bhandari%20M%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [Walter SD](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Walter%20SD%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [Heels-Ansdell D](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Heels-Ansdell%20D%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [Guyatt GH](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Guyatt%20GH%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract); [**Collaboration for Outcomes Assessment in Surgical Trials (COAST) Musculoskeletal Group**](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Collaboration%20for%20Outcomes%20Assessment%20in%20Surgical%20Trials%20%28COAST%29%20Musculoskeletal%20Group%22%5BCorporate%20Author%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract). Radiographs of hip fractures were digitally altered to mask surgeons to the type of implant without compromising the reliability of quality ratings or making the rating process more difficult. *J Clin Epidemiol*. 2009 Feb;62(2):214-223.e1. Epub 2008 Sep 7. Collaborator
34. [Bhandari M](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Bhandari%20M%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [Sprague S](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Sprague%20S%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract), [Schemitsch EH](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22Schemitsch%20EH%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract); [**International Hip Fracture Research Collaborative**](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=pubmed&Cmd=Search&Term=%22International%20Hip%20Fracture%20Research%20Collaborative%22%5BCorporate%20Author%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVAbstract): “Resolving controversies in hip fracture care: the need for large collaborative trials in hip fractures.” *J Orthop Trauma* 23(6), 479-84, 2009. Collaborator
35. Lindenhovius A, Karanicolas PJ, Bhandari M, van Dijk N, Ring D; **Collaboration for Outcome Assessment in Surgical Trials**: “[Interobserver reliability of coronoid fracture classification: two-dimensional versus three-dimensional computed tomography](http://www.ncbi.nlm.nih.gov/pubmed/19833449?itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum&ordinalpos=1)” *J Hand Surg Am*. 2009 Nov;34(9):1640-6. Epub 2009 Oct 14. Collaborator
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37. **Zura RD**, Adams SB Jr, Jeray KJ, Obremskey WT, Stinnett SS, Olson SA; for the Southeastern Fracture Consortium Foundation: “[Timing of Definitive Fixation of Severe Tibial Plateau Fractures With Compartment Syndrome Does Not Have an Effect on the Rate of Infection.](http://www.ncbi.nlm.nih.gov/pubmed/20495494)” *J Trauma*. 2010 May 20.

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# Flow Investigators: “ Fluid lavage of open wounds (FLOW): design and rationale for a large, multicenter collaborative 2 x 3 factorial trial of irrigating pressures and solutions in patients with open fractures.” *J Trauma*. 2011 Sep;71(3):596-606. Collaborator.

# Edlich RF, Long WB 3rd, Gubler KD, Rodeheaver GT, Thacker JG, Borel L, Dahlstrom JJ, Clark JJ, Kasinger E, Lin KY, Cox MJ, Zura RD.: “[A Wakeup Call to The Food and Drug Administration to Ban Cornstarch on Medical Gloves.](http://www.ncbi.nlm.nih.gov/pubmed/20656434)” *J Emerg Med.* 2010 Jul 23.

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# Wittstein J, Vinson E, Zura R.: Traumatic Subchondral Fracture of the Femoral Head: A Case Report. *Journal of Surgical Orthopaedic Advances* 19(4): 234-235, 2010.

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# Payne DES, Wray WH, Ruch DS, Zura RD, Moorman CT. “Outcome of Intramedullary Fixation of Clavicular Fractures.” *Am J Orthop* 2011; Jun:40(6): E99-E104.

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# Guitton TG, Ring D; Science of Variation Group. Interobserver reliability of radial head fracture classification: two-dimensional compared with three-dimensional CT [J Bone Joint Surg Am.](http://www.ncbi.nlm.nih.gov/pubmed/22048097) 2011 Nov 2;93(21):2015-21. Collaborator

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2. William C. Eward, DVM, MD; Dennis Darcey, MD; Leslie G. Dodd, MD; **Robert D. Zura, MD**.: “Case Report: Lead Toxicity Associated with an Extra-Articular Retained Missile 14 Years After Injury” *Journal of Surgical Orthopaedic Advances,* Vol 20 (4): 241-246, 2011.
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31. Mackowiak JI, Mack CD, Irwin DE, **Zura R**. Randomized Clinical Trial or Real-World Evidence: How Historical Events, Public Demand, and the Resulting Laws and Regulations Shaped the Body of Medical Evidence. *J Orthop Trauma*. 2021 Mar 1;35(Suppl 1):S17-S21. doi: 10.1097/BOT.0000000000002040. PMID: 33587542.
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33. Pogorzelski D, Nguyen U, McKay P, Thabane L, Camara M, Ramsey L, Seymour R, Goodman JB, McGee S, Fraifogl J, Hudgins A, Tanner SL, Bhandari M, Slobogean GP, Sprague S; PREP-IT Investigators Executive Committee:; Steering Committee; **Adjudication Committee**; Data and Safety Monitoring Committee; Research Methodology Core; Patient Centred Outcomes Core; Orthopaedic Surgery Core; Operating Room Core; Infectious Disease Core; Military Core; McMaster University Methods Center; University of Maryland School of Medicine Administrative Center; University of Maryland School of Pharmacy, The PATIENTS Program; PREP-IT Clinical Sites: Lead Clinical Site (Aqueous-PREP and PREPARE); Aqueous-PREP and PREPARE; Aqueous-PREP; PREPARE; PREP-IT Investigators Executive Committee. Managing work flow in high enrolling trials: The development and implementation of a sampling strategy in the PREPARE trial. *Contemp Clin Trials Commun.* 2021 Jan 23;21:100730. doi: 10.1016/j.conctc.2021.100730. PMID: 33605946; PMCID: PMC7873628.
34. Sprague S, Guyatt P, Bzovsky S, Nguyen U, Bhandari M, Thabane L, Petrisor B, Johal HS, Leonard J, Dodds S, Mossuto F, O'Toole RV, Howe A, Demyanovich HK, Camara M, O'Hara NN, Slobogean GP; **PREP-IT Investigators**. Pragmatic randomized trial evaluating pre-operative aqueous antiseptic skin solution in open fractures (Aqueous-PREP): the feasibility of a cluster randomized crossover study. *Pilot Feasibility Stud*. 2021 Mar 1;7(1):61. doi: 10.1186/s40814-021-00800-8. PMID: 33648577.
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 **Non-refereed publications:**

1. **Zura RD,** Krewatch MR, Crowder TT, Manson M, Richardson WJ. “From Shands to Nunley…..The History of Duke Orthopaedics. *The Duke Orthopaedic Journal* July 2010-June 2011. Vol. 1 Number 1
2. Viens NA, Sutter EG, Mangiapani DS, Adams SB, **Zura RD**: “Unstable Ankle Fractures in Older Patients: A Consecutive Series with Modern Internal Fixation Techniques.” *The Duke Orthopaedic Journal* Vol 3, No. 1. June 2013.
3. Parekh S, Bertrand T, **Zura R**, Adams S, Yan A: “Novel Techniques in Treating Calcaneal Tuberosity Fractures.” *The Duke Orthopaedic Journal* 2014;4(1):3-7.
4. Antonio Barquet, Joao Matheus Guimaraes, Enrique Barrios, Mariela Garau, **Robert D Zura**, and William C Eward. “Epidemiology and Diagnosis of Ipsilateral Femoral Neck and ShaftFractures: A Systematic Review of 1761 cases in 1758 Patients” *Trauma Cases Rev* 2015, 1:3
5. **Zura RD.** Column: “Powdered Gloves Ban Only Helps Surgical Practices.” *Surgical Products* April, 2016.
6. Matson AP, Green CL, Hurwitz SR, **Zura RD**. “Stability of Ankle Fracture-Dislocation followind Sucessful Closed Reduction” *The Duke Orthop J* 2017;7(1):58-63.
7. Blizzard DJ, Agaba P, Morwood MP, Jerele JL, **Zura RD**. “Risks and Benefits of the Different Types of Gloves used in the Perioperative Setting” *The Duke Orthop J* 2017;7(1)3-10.

 **Chapters:**

1. Olson, SA; Reilly, MC; **Zura, RD**. Chapter 2: “ Treatment considerations for Surgical and Nonsurgical Management of Pelvic Ring Injuries.” *Monograph Series 35. Acetabular and Pelvic Fractures.* Olson, SA and Reilly, MC (eds). AAOS, Chicago, IL. 2007.
2. **Zura RD** and Kahn M. Chapter 43: “Fractures of the Tibial Plateau*”, OKU 5: Orthopaedic Knowledge Update – Trauma*. Ricci, WM and Ostrum RF (eds), AAOS, Chicago, IL. 2016.

**Books:**

1. Instructional Course Lectures, Volume 66. AAOS 2017 – Section Editor – Trauma
2. Instructional Course Lectures, Volume 67. AAOS 2018 – Section Editor - Trauma
3. Instructional Course Lectures, Volume 68. AAOS 2019 – Section Editor - Trauma
4. Instructional Course Lectures, Volume 69. AAOS 2020 – Section Editor - Trauma

 **Abstracts:**

1. **Zura RD**, Kahler DM: Operative Treatment of Calcaneus Fractures Through an Extended Lateral Approach Using Skeletal Traction, *VMQ* Vol 123: No 3:197, 1996.
2. Abel MF, **Zura RD**, and Kahler DM: “Computer Assisted Pelvic Osteotomy for Acetabular Dysplasia” Pediatric Orthopaedic Society of North America 1999.
3. Vincent AB, Sims SH, Kellam JF, Bosse MJ, Peindl RD, and **Zura RD**: “Unstable Proximal Tibia Fractures: A Biomechanical Evaluation of Three Methods of Fixation and Initial Clinical Results. Combined Meeting of the New Zealand and Australian Orthopaedic Associations. Queenstown, New Zealand. *JBJS-B* Vol. 84 Supplement 3, October 2001.
4. Fox R, **Zura RD**. Management of Musculoskeletal Injuries Secondary to Gunshot. *Injury* Vol 47, Supplement 5, page S1. October, 2016.

**Major invited lectures**

1996

* Operative Treatment of Calcaneus Fractures Through an Extended Lateral Approach Using Skeletal Traction. Virginia Orthopaedic Society – Richmond, VA, 1996.
* Evaluation of a Computer Integrated Surgical Technique for Percutaneous Fixation of Transverse Acetabular Fractures. University of Virginia Alumni Meeting – Charlottesville, VA, 1996.

1997

* Evaluation of a Computer Integrated Surgical Technique for Percutaneous Fixation of Transverse Acetabular Fractures. Virginia Orthopaedic Society – Williamsburg, VA, 1997.

1998

* Optimizing Registration Accuracy in Computer Assisted Percutaneous Pelvic Surgery. CAOS’98, Pittsburgh 1998.

2001

* Orthopaedic Trauma: a Review of Current Treatment Options: lecture given at Orthopaedic Nursing Conference, Savannah, GA, 2001.

2002

* Orthopaedic Trauma. Medical College of Georgia Perioperative Nurses Course, September 2002.

2003

* Orthopaedic Trauma. Medical College of Georgia Perioperative Nurses Course, February 2003.
* Orthopaedic Fractures. Medical College of Georgia OB/GYN lecture series, March 2003.

2004

* Locked Plating Lab: Instructor: Orthopaedic Trauma Association, Ft. Lauderdale, FL, October 2004.

2005

* Diaphyseal Humeral Fractures and Nonunions: Lecture given at Southeastern Fracture Symposium Greensboro, NC, January 2005.
* Basic Fracture Care: Lecture given at Musculoskeletal Assessment for Primary Care Providers - Durham, NC, April 2005.
* Femur Fractures: Smith & Nephew Perioperative Nurses Course, Myrtle Beach, SC, August 2005.
* Locking Plates: Smith & Nephew Perioperative Nurses Course, Myrtle Beach, SC, August 2005.
* Basic Fractures: Orthopaedic Trauma Class, Duke University Medical Center, Durham, NC, September 2005.
* Minimally Invasive Plate Osteosynthesis: Synthes Advanced Technology Forum, Durham, NC, September 2005.
* Pilon Fractures: Synthes Advanced Technology Forum, Durham, NC, September 2005.
* Extra-articular Proximal Tibia Fractures: Synthes Advanced Technology Forum, Durham, NC, September 2005.
* Lower Extremity Amputations: When, Where, and How?: OTA Residents Basic Fracture Course, Ottawa, Canada, October 2005.

2006

* Ankle Fractures: Basics and What’s New. Southeastern Fracture Symposium – Greensboro, NC, January 2006.
* Orthopaedic Trauma – 16th Annual Duke Trauma Conference – Durham, NC, March 2006.
* Tibial Non-Unions Duke/Synthes Advanced Trauma Symposium – Duham, NC, September 2006.
* Lower Extremity Amputations: When, Where, and How?: OTA Residents Basic Fracture Course, Phoenix, AZ, October 2006.
* Trochanteric Entry Femoral Nailing – Debate. AO Advanced Course, Davos, Switzerland. December 2006.
* The Effect of Timing of Definitive Fixation for Tibial Plateau Fractures with Associated Compartment Syndrome on Infection Rates. Robert D Zura MD (Presenter), Vani Sabesan MD, Lois Ann Nichols MD, Barnaby Dedmond MD, Patrick Leach MD, Kyle Jeray MD, Wlliam Obremskey MD, Brian Mata, Ricardo Pietrobon, MD, PhD, MBA, Steven A Olson MD Podium Presentation: Orthopaedic Trauma Association Annual Meeting – Phoenix, AZ, October 2006.
* The Effect of Knee Position at the time of Torniquet Inflation on Operative Knee Range-of-Motion Podium Presentation: Eastern Orthopaedic Association. Boca Raton, FL, October 2006.

2007

* The Effect of Timing of Definitive Fixation for Tibial Plateau Fractures with Associated Compartment Syndrome on Infection Rates. Podium Presentation American Academy of Orthopaedic Surgeons. San Diego, CA, Feb. 16, 2007.
* The Effect of Timing of Definitive Fixation for Tibial Plateau Fractures with Associated Compartment Syndrome on Infection Podium Presentation Orthopaedic Trauma Association – Specialty Day. San Diego, CA, Feb. 17, 2007.
* Open Fractures – Review of Current Treatment: New Jersey Orthopaedic Society Current Concepts in Orthopaedics. Great Exuma, Bahamas, March 2007.
* Femoral Nailing – From the Hip or the Knee?: New Jersey Orthopaedic Society Current Concepts in Orthopaedics. Great Exuma, Bahamas, March 2007.
* The Reamer Irrigator Aspirator – Introduction of New Technology: New Jersey Orthopaedic Society Current Concepts in Orthopaedics. Great Exuma, Bahamas, March 2007.
* Review of Basic Principles of Plating and Update on Locked Plating: New Jersey Orthopaedic Society Current Concepts in Orthopaedics. Great Exuma, Bahamas, March 2007.
* Antegrade Femoral Nailing: Trochanteric Entry Site, Conferencista Cumbre de Expertos en Enclavijado Endomedular (Expert Intramedullary Nail Conference) Asuncion, Paraguay - November 2007.
* Management of Open Fractures and Intramedullary Nailing: Conferencista Cumbre de Expertos en Enclavijado Endomedular (Expert Intramedullary Nail Conference) Asuncion, Paraguay - November 2007.
* Biomechanics & biology of relative stability: Conferencista Cumbre de Expertos en Enclavijado Endomedular (Expert Intramedullary Nail Conference) Asuncion, Paraguay - November 2007.
* Subtrochanteric Femur Fractures: Conferencista Cumbre de Expertos en Enclavijado Endomedular (Expert Intramedullary Nail Conference) Asuncion, Paraguay - November 2007.

2008

* Pilon Fractures: Southeastern Fracture Conference, Charleston, SC. January 18, 2008.
* Open Tibia Fractures: Orthopaedic Trauma: Concepts to Controversies. Snowmass, Colorado – February 2008.
* Humeral Shaft Fractures: Orthopaedic Trauma: Concepts to Controversies. Snowmass, Colorado – February 2008.
* Distal Tibia Fractures, Grand Rounds: University of Louisville, Kentucky – February 26, 2008.
* Extra-articular Proximal and Distal Tibia Fractures, Grand Rounds University of Tennessee – Chattanooga, TN – April 21, 2008.
* Femoral Nailing: Choosing the Right Starting Point and Technical Tips: Napa Valley Orthopaedic Trauma Symposium – September 18, 2008.
* Open Tibia Fractures: Current Treatment Protocols: Napa Valley Orthopaedic Trauma Symposium – September 20, 2008.
* Lower Extremity Amputations: When, Where, and How? OTA Residents Basic Fracture Course, Denver, CO. October 2008.

2009

* Damage Control Orthopaedics: 19th Annual Duke Trauma Conference. Durham, NC, March 2009.
* Bone Morphogenic Proteins for Fracture Healing: Conferencista Cumbre de Expertos en Enclavijado Endomedular (Expert Intramedullary Nail Conference) Kuntscher International Society, Sociedad de Ortopedia y Traumatologia Filial. Santa Cruz de la Sierra, Bolivia. March 2009.
* Subtrochanteric Femur Fractures: Conferencista Cumbre de Expertos en Enclavijado Endomedular (Expert Intramedullary Nail Conference) Kuntscher International Society, Sociedad de Ortopedia y Traumatologia Filial. Santa Cruz de la Sierra, Bolivia. March 2009.
* Intramedullary Infections and Treatment Options: Conferencista Cumbre de Expertos en Enclavijado Endomedular (Expert Intramedullary Nail Conference) Kuntscher International Society, Sociedad de Ortopedia y Traumatologia Filial. Santa Cruz de la Sierra, Bolivia. March 2009.
* Reamed Vs. Unreamed Nails for Closed Tibial Fractures: Conferencista Cumbre de Expertos en Enclavijado Endomedular (Expert Intramedullary Nail Conference) Kuntscher International Society, Sociedad de Ortopedia y Traumatologia Filial. Santa Cruz de la Sierra, Bolivia. March 2009.
* Treating Nonunion: The Traumatologist’s Perpective: Eastern Orthopaedic Association, Nassua, Bahamas. June, 2009.
* Lower Extremity Amputations: When, Where, and How? OTA Residents Basic Fracture Course, SanDiego, CA. October 2009.

2010

* BMP in Fracture Healing: Is it Worth it? Congreso International de clavos endomedulares / International Congress on Intramedullary Nailing (Kuntscher Society) Gramado, Brazil April 2010.
* Antegrade Femoral Nailing: I prefer Trochanteric Entry: Congreso International de clavos endomedulares / International Congress on Intramedullary Nailing (Kuntscher Society) Gramado, Brazil April 2010.
* Reamed Vs. Unreamed Tibial Nailing: Does it matter? Congreso International de clavos endomedulares / International Congress on Intramedullary Nailing (Kuntscher Society) Gramado, Brazil April 2010.
* Distal Tibia Fractures: I prefer Intramedullary Nails: Congreso International de clavos endomedulares / International Congress on Intramedullary Nailing (Kuntscher Society) Gramado, Brazil April 2010.
* Antibiotic Nails for Infection: Congreso International de clavos endomedulares / International Congress on Intramedullary Nailing (Kuntscher Society) Gramado, Brazil April 2010.=
* Intertrochanteric Hip Fractures: I prefer Plates. Southern Orthopaedic Association, Puerto Rico. June, 2010.
* Femoral Shaft Fractures: I prefer Trochanteric Entry Nails. Southern Orthopaedic Association, Puerto Rico. June, 2010.
* Lower Extremity Amputations: When, Where, and How? OTA Residents Basic Fracture Course, Baltimore, MD. October 2010.
* Open Tibia Fractures and Complex Distal Tibia Fractures. Landstuhl Regional Medical Center. Landstuhl, Germany. November 18, 2010
* Complex Proximal Tibia Fractures. Landstuhl Regional Medical Center. Landstuhl, Germany. November 24, 2010.
* Treatment of Open Tibia Fractures and Complex Proximal and Distal Tibial Fractures. Grand Rounds, Medical College of Georgia. Augusta, GA, December 8, 2010.
* “Monday November 22, Landstuhl, Germany.” Fracture Conference, Medical College of Georgia. Augusta, GA, December 9, 2010.

2011

* “Complex Proximal and Distal Tibia Fractures.” Grand Rounds Steadman Phillipon Research Institute and Clinic. Vail, CO. March 7, 2011.
* “New Borderlines of Intramedullary Fixation of Proximal Tibia Fractures.” 12th European Congress of Trauma and Emergency Surgery. Milan, Italy. April 29, 2011.
* “Update On Bimalleolar Ankle Fractures” Southern Orthopaedic Association Hawaii. July 21, 2011
* Moderator: Update on Foot and Ankle Fractures. Southern Orthopaedic Association Hawaii. July 21, 2011
* Lower Extremity Amputations: When, Where, and How? OTA Residents Basic Fracture Course,San Antonio, TX. October 2011.
* “A Comparison of Efficacy and Resource Utilization Between Acute BMP-2 and Standard Treatment in Type III Tibia Fractures: A Multicnter Prospective, Randomized Controlled Trial” OTA Study Group: Bosse M, **Zura RD**, Pollak A, Volgas D, Obremskey W, Barei D, Seymour R. Podium Presentation (Bosse- presenter) OTA. San Antonio, TX October, 2011.

2012

* “Pilon Fractures” South Eastern Fracture Symposium Durham, NC. January 2012
* “Novel Locking Techniques, When You Don’t Have Fluoroscopy” Curso Internacional de Enclavijado Endomedular (Kuntscher Society Medullary Nailing Course) March 23, 2012 Medellin, Colombia.
* “Antegrade Femoral Nailing Starting Point Options, I prefer Trochanteric” Curso Internacional de Enclavijado Endomedular (Kuntscher Society Medullary Nailing Course) March 23, 2012 Medellin, Colombia.
* “Proximal Tibial Fractures – Nailing Tips and Tr Co-Chairman TREW (Trauma, Reconstruction, Endoscopy, Wound) Course. Durham, NC December 2012
* icks” Curso Internacional de Enclavijado Endomedular (Kuntscher Society Medullary Nailing Course) March 23, 2012 Medellin, Colombia.
* “Distal Tibia Fractures – Nailing Tips and Tricks” Curso Internacional de Enclavijado Endomedular (Kuntscher Society Medullary Nailing Course) March 23, 2012 Medellin, Colombia.
* “Monday November 22, Landstuhl, Germany” Curso Internacional de Enclavijado Endomedular (Kuntscher Society Medullary Nailing Course) March 23, 2012 Medellin, Colombia
* “Management of Osteomyelitis with Antibiotic Nails” Curso Internacional de Enclavijado Endomedular (Kuntscher Society Medullary Nailing Course) March 23, 2012 Medellin, Colombia
* “Analysis of Two Protocols for the Care of Elderly Patients with Hip Fractures”: Christopher R. Brown, MD, Maria J. Manson, Thomas Owens MD, John Boling MS, Elizabeth Hubbard MD, Steven Olson MD, Robert Zura MD. Poster - Southern Orthopaedic Association. White Sulphur Springs, WV. July 2012
* Moderator Trauma Session: Southern Orthopaedic Association. White Sulphur Springs, WV. July 2012
* “Analysis of Patient Characteristics and Its Effect on Perioperative Complications in Elderly Patients with Hip Fractures.” Christopher Brown MD, John Boling MS, Maria Manson, Thomas Owens MD, Robert D. Zura MD (Presenter): Podium - Southern Orthopaedic Association. White Sulphur Springs, WV. July 2012
* “Medical Volunteering – Landstuhl Germany.” Podium - Southern Orthopaedic Association. White Sulphur Springs, WV. July 2012
* “Ankle Fractures in older patients: the use of augmented fixation techniques.” Podium – Osteosynthese International – Annual Congress of the Gerhard Kuntscher Society – Rostock, Germany. September 2012
* Session III: Hints, Pitfalls and Complication management in Proximal Femoral Nailing – Moderator - Osteosynthese International – Annual Congress of the Gerhard Kuntscher Society – Rostock, Germany. September 2012
* “Relationship between pre-fracture characteristics and peri-operative complications in the elderly hip fracture patient, predictors of LOS” Podium – Osteosynthese International – Annual Congress of the Gerhard Kuntscher Society – Rostock, Germany. September 2012
* “VTE and PE Treatment: Current Recommendations” Orthopaedic Trauma Association Basic Science Forum Minneapolis, MN. October, 2012
* Lower Extremity Amputations: When, Where, and How? OTA Residents Basic Fracture Course OTA, Minneapolis, MN October 2012
* “Alternative Solutions in Post-Traumatic Reconstruction: I need to make bone. Induced Membranes.” Orthopaedic Trauma Association Mini Symposium Minneapolis, MN. October, 2012
* “Hip Fractures:” TREW (Trauma, Reconstruction, Endoscopy, Wound) Course. Durham, NC December 2012
* “Nailing Techniques in the Tibia:” Lower Extremity Masters Course. Davos, Switzerland December, 2012
* “Management of Bone Loss Following Open Fractures:” Lower Extremity Masters Course. Davos, Switzerland December, 2012

2013

* “Chronic Osteomyelitis – The Orthopaedic Perspective”: SouthEastern Fracture Consortium, Charleston, SC. February 2013.
* “VTE and PE Treatment: Current Recommendations”: SouthEastern Fracture Consortium, Charleston, SC. February 2013.
* “Bone Growth Stimulators and How they fit in my practice” Exogen Science Summit Amsterdam, Netherlands. June 2013
* “Exogen – Nonunion Evidence” Exogen Science Summit Berlin, Germany. November 2013
* “Case Studies Roundtable” Exogen Science Summit Berlin, Germany. November 2013
* “Proximal Tibia Fractures” Landstuhl Army Hospital, Landstuhl, Germany. November 2013
* “Distal Tibia Fractures” Landstuhl Army Hospital, Landstuhl, Germany. November 2013
* “My Experiences as an OTA / Red Cross Distinguished Visiting Scholar in Landstul Army Hospital” Vail, Colorado SOMOS (Society of Military Orthopaedic Surgeons) December 2013.
* “Where does Ultrasound fit in? Evidence for Bone Stimulators in Fractures.” Vail, Colorado SOMOS (Society of Military Orthopaedic Surgeons) December 2013.

2014

* “Subtrochanteric Fractures” SouthEastern Fracture Consortium, Durham, NC January 31, 2014.
* “NonUnion Diagnosis” Bioventus Science Summit. San Diego, Ca. February 21, 2014.
* “Exogen Fresh Fracture Data” Bioventus Science Summit. San Diego, Ca. February 21, 2014.
* “Bone Healing Risk Factors” Bioventus Science Summit. San Diego, Ca. February 21, 2014.
* “Welcome and Levels of Evidence – Evidence based Medicine” Bioventus Science Summit. San Diego, Ca. February 21, 2014.
* “Bone Marrow Aspirate Concentrate (BMAC) and its Use in Trauma and Osteomyelitis” BMAC Symposium – Harvest Technologies. Teaneck, NJ. March 5, 2014.
* “Intertrochanteric Fractures – Treatment Options and Outcomes” AO Trauma Course – Advanced Principles of Fracture Management. Guangzhou, China June 14-16, 2014.
* “Complex Tibial Plateau Fractures” AO Trauma Course – Advanced Principles of Fracture Management. Guangzhou, China June 14-16, 2014.
* “Early and Definitive Treatment of Pilon Fractures” AO Trauma Course – Advanced Principles of Fracture Management. Guangzhou, China June 14-16, 2014.
* “Complex Malleolar Fractures” AO Trauma Course – Advanced Principles of Fracture Management. Guangzhou, China June 14-16, 2014.
* “Exogen - Evidence for Bone Stimulators in Fractures” South Bend Indiana June 23, 2014.
* Moderator – Symposium 1: Trauma – The Humerus from Top to Bottom. Southern Orthopaedic Association. Beaver Creek, CO. July 17, 2014.
* “All Humeral Shaft Fractures Should be Plated” Southern Orthopaedic Association. Beaver Creek, CO. July 17, 2014.
* “Decreasing Incidence of Hip Fracture in the US Medicare Population, 2005-2011” R. Andrew Henderson, Jonathan Godin, Benjamin Streufert, Richard Mather, Robert Zura (presenter) Osteosynthese International 2014 “Nails and More.” Krems, Austria. September 2014.
* “Repair of Intertrochanteric Hip Fracture: Cephalomedullary Nail Predominates Over Dynamic Hip Screw” Benjamin Streufert, R. Andrew Henderson, Jonathan Godin, Richard Mather, Robert Zura (presenter). Osteosynthese International 2014 “Nails and More.” Krems, Austria. September 2014.
* Keynote Lecture: “Orthopaedic Care at Landstuhl Army Hospita Osteosynthese International 2014 “Nails and More.” Krems, Austria. September 2014.”
* “Nailing Subtrochanteric Femur Fractures – How I do them.” XX Congreso de la Associacion del Trauma Ortopedico. Buenos Aires, Argentina. October 30-November 1, 2014.
* Expert Panel – Proximal Femur Fractures: XX Congreso de la Associacion del Trauma Ortopedico. Buenos Aires, Argentina. October 30-November 1, 2014.
* “Entry Points for Antegrade Femoral Nailing.” XX Congreso de la Associacion del Trauma Ortopedico. Buenos Aires, Argentina. October 30-November 1, 2014.
* Expert Panel – Diaphyseal Femur Fractures: XX Congreso de la Associacion del Trauma Ortopedico. Buenos Aires, Argentina. October 30-November 1, 2014.
* “Nails Vs. Plates for Distal Tibia Fractures – Which is Superior?” XX Congreso de la Associacion del Trauma Ortopedico. Buenos Aires, Argentina. October 30-November 1, 2014.
* Expert Panel – Tibia Fractures: XX Congreso de la Associacion del Trauma Ortopedico. Buenos Aires, Argentina. October 30-November 1, 2014.
* “What’s New in Nailing Lower Extremity Fractures.” XX Congreso de la Associacion del Trauma Ortopedico. Buenos Aires, Argentina. October 30-November 1, 2014.
* “Managing Gunshot Wounds and other War Injuries to the Extremities.” XX Congreso de la Associacion del Trauma Ortopedico. Buenos Aires, Argentina. October 30-November 1, 2014.
* Expert Panel – PolyTrauma: XX Congreso de la Associacion del Trauma Ortopedico. Buenos Aires, Argentina. October 30-November 1, 2014.
* “Innovation in Orthopaedics” Cardinal Health Technical Council. Lake Geneva, Wisconsin. November 17, 2014.

2015

* “Tibia Fractures” Bioventus Sales Training. Feb 18, 2015. Durham, NC.
* “Powdered Gloves. Is it time for a Change?” AORN. Denver, Co. March 9, 2015.
* “Ortho Trauma Room Utilization, What do we Know?” Yap MV, Balajonda NG, Zura RD. Poster AORN. Denver, Co. March 2015.
* “Role & Results of LIPUS to Improve Bone Healing” VuMedi Webinar – Bone Healing – How To Treat Non-Unions May 20, 2015.
* “Exogen: Comorbidities and Value in the Current Health Care System” EFFORT Symposium - Prague, Czech Republic. May 29, 2015.
* “Subtrochanteric Femur Fractures” Southern Orthopaedic Association. Asheville, NC. July18, 2015.
* “Closing the gap: a novel technique for humeral shaft nonunion using cup in cone reamers” Nickel BT (Presenter), Klement MR, Richard M, Zura RD, Garrigues GE. Kuntscher Society Annual Meeting – Osteosynthese International 2015. Brussels, Belgium. September 2015.
* “The Effects of computer-assisted surgery training in the placement of iliosacral screw. Kuntscher Society Annual Meeting – Osteosynthese International 2015. Brussels, Belgium. September 2015.
* “Femoral Nailing in the Pediatric population” Zura RD, Nickel BT (presenter). Kuntscher Society Annual Meeting – Osteosynthese International 2015. Brussels, Belgium. September 2015.
* “Predictors of failure for delayed surgical treatment of closed ankle fracture-dislocations.” Kuntscher Society Annual Meeting – Osteosynthese International 2015. Brussels, Belgium. September 2015.
* “Coexisting glenohumeral arthritis increases proximal humeral fracture nonunion after nonsurgical treatment.” Nickel BT (presenter), Klement MR, Bala A, Zura RD, Garrigues GE. Kuntscher Society Annual Meeting – Osteosynthese International 2015. Brussels, Belgium. September 2015.
* “Powdered Gloves. Is it time for a Change?” KAORN. Daejong, Korea. November 7, 2015.

2016

* “The Long Term Results of Syndesmotic Malreduction: What Happens When We Get it Wrong?” South Eastern Fracture Symposium. Durham, North Carolina. January 29, 2016.
* “Case Presentations and Resolutions.” Bioventus Science Summit. Chicago, IL. June 10, 2016.
* “Can Nonunions be Predicted?” Bioventus Science Summit. Chicago, IL. June 10, 2016.
* “Exogen: Clinical Data.” Bioventus Science Summit. Chicago, IL. June 10, 2016.
* “Antegrade Femoral Nailing: How I do it in 2016.” Il Encuentro Centroamericano de Asociaciones de Ortopedia y Traumatologia. XXV Congreso Nacional de Ortopedia y Traumatologia. Cumbre de Expertos en Encavijado Endomedular Kuntscher Society. Copan, Honduras. June 16, 2016.
* “Subtrochanteric Femur Fractures: When I use Plates.” Il Encuentro Centroamericano de Asociaciones de Ortopedia y Traumatologia. XXV Congreso Nacional de Ortopedia y Traumatologia. Cumbre de Expertos en Encavijado Endomedular Kuntscher Society. Copan, Honduras. June 16, 2016.
* “Nonunions: What do we know and can we predict them?” University of Washington Resident Research Day / Graduation. Seattle, WA. June 2016.
* “OTA Distinguished Visiting Scholar Program.” University of Washington Resident Research Day / Graduation. Seattle, WA. June 2016.
* “Collaboration: Say Yes! It’s about the People.” University of Washington Resident Research Day / Graduation. Seattle, WA. June 2016.
* “Tibial Plateau Fractures” Southern Orthopaedic Association. Symposium 6 – Lower Extremity Trauma. Naples, FL. July 30, 2016.
* “Proximal 1/3 and Distal 1/3 Tibia Fractures”: AAOS-IOA: 3rd Trauma Conclave, New Dehli, India. September 16, 2016.
* “Management of Open Tibia Fractures”: AAOS-IOA: 3rd Trauma Conclave, New Dehli, India. September 16, 2016.
* “Subtrochanteric Femoral Fractures”: AAOS-IOA: 3rd Trauma Conclave, New Dehli, India. September 16, 2016.
* “Pilon Fractures”: AAOS-IOA: 3rd Trauma Conclave, New Dehli, India. September 16, 2016.
* “Humeral Shaft Fractures – All Should be Plated”: AAOS-IOA: 3rd Trauma Conclave, New Dehli, India. September 17, 2016.
* “Humeral Shaft Fractures – All Should be Nailed”: AAOS-IOA: 3rd Trauma Conclave, New Dehli, India. September 17, 2016.
* “Proximal 1/3 and Distal 1/3 Tibia Fractures”: AAOS-IOA: 3rd Trauma Conclave, Goa, India. September 19, 2016.
* “Management of Open Tibia Fractures”: AAOS-IOA: 3rd Trauma Conclave, Goa, India. September 19, 2016.
* “Humeral Shaft Fractures – All Should be Plated”: AAOS-IOA: 3rd Trauma Conclave, Goa, India. September 20, 2016.
* “Humeral Shaft Fractures – All Should be Nailed”: AAOS-IOA: 3rd Trauma Conclave, Goa, India. September 20, 2016.
* “Tibial Shaft Fractures”: Keynote Address: Gerhard Kuntscher Society Annual Meeting. Osteosynthese International 2016. Aschaffenburg, Germany. September 22, 2016.
* “Management of Muscoloskeletal Injuries Secondary to Gunshot Wounds”: Rabun Fox (presenter), RD Zura. Gerhard Kuntscher Society Annual Meeting. Osteosynthese International 2016. Aschaffenburg, Germany. September 22, 2016.
* “Nonunion and Unplanned Reoperation Rates in Adult Proximal Femoral Fractures: a Meta-Analysis”: Riikka Nomides (presenter), RD Zura, RG Steen. Gerhard Kuntscher Society Annual Meeting. Osteosynthese International 2016. Aschaffenburg, Germany. September 22, 2016.
* “The Epidemiology of Fracture Nonunion in 18 Human Bones – Analysis of a Payer Database ~ 90.1 million Patients”: Robert D Zura (presenter), Z. Xiong, T Einhorn, JT Watson, R Ostrum, MJ Prayson, G Della Rocca, S Mehta, T McKinley, Z Wang, RG Steen. Gerhard Kuntscher Society Annual Meeting. Osteosynthese International 2016. Aschaffenburg, Germany. September 24, 2016.
* “Periprosthetic Fractures”: Symposium 10. 104th Annual Meeting of the Clinical Orthopaedic Society. New Orleans, LA. October 1, 2016.
* “The Results of Syndesmotic Malreduction: What Happens When we get it Wrong?”: Mini Symposium; Syndesmosis Injury: How Times have Changed. Orthopaedic Trauma Association Annual Meeting. Washington, D.C. October 7, 2016.
* “Fracture Nonunion Literature Review and Update” Vu-Medi. October 11, 2016.
* “Can Fracture Nonunion Be Predicted?” Advances in Bone Healing Summit. Phoenix, AZ. October 14, 2016.

2017

* “Road Traffic Accidents and Trauma Care in Uganda” Second Series of Global Forums on Road Traffic Trauma. Pakistan, Brazil, USA, Tanzania, NIH - National Library of Medicine. January 30, 2017.
* “AAOS – India Trauma Conclaves – Experience, Updates, and Opportunities” Second Series of Global Forums on Road Traffic Trauma. Pakistan, Brazil, USA, Tanzania, NIH - National Library of Medicine. January 30, 2017.
* “The Future of Academic Medicine” Louisiana Orthopaedic Association. New Orleans, LA February 10, 2017.
* “Low Intensity Pulsed Ultrasound (LIPUS) and Fracture Healing” University of Alabama (UAB) Grand Rounds – Orthopaedics. March 30, 2017.
* “Why Compliance Matters” International Science Summit. April 28, 2017 – Amsterdam
* “Risk Factors and Bone Healing” ” International Science Summit. April 28, 2017 – Amsterdam
* “Nonunions – What do We Know and Can We Predict Them?” LSU-Shreveport Orthopaedic Graduation / Research Day. Shreveport, LA. June 16, 2017.
* “OTA Distinguished Visiting Scholar Program” LSU-Shreveport Orthopaedic Graduation / Research Day. Shreveport, LA. June 16, 2017.
* “Management of Gunshot Wounds and Ballistic fractures of the Upper Extremity: Our Experience at an Urban Trauma Center and Review of Literature” Thomas Royals (Presenter) Gerhard Küntscher Society Annual Meeting: Osteosynthese International 2017. Munich, Germany. September 13-15, 2017.
* “Risk factors for nonunion of bone fracture in pediatric patients” Gerhard Küntscher Society Annual Meeting: Osteosynthese International 2017. Munich, Germany. September 13-15, 2017.
* “Cost savings using ITS small fragment plating in lateral malleolus ankle fractures: our experience at an Urban Trauma Center” Thomas Royal (presenter) Gerhard Küntscher Society Annual Meeting: Osteosynthese International 2017. Munich, Germany. September 13-15, 2017.
* “Nonunion and unplanned reoperation rates in adult distal and diaphyseal femoral fractures – a systematic review and meta-analysis” Gerhard Küntscher Society Annual Meeting: Osteosynthese International 2017. Munich, Germany. September 13-15, 2017.
* “Impact of chronic analgesic use on fracture nonunion” Gerhard Küntscher Society Annual Meeting: Osteosynthese International 2017. Munich, Germany. September 13-15, 2017.
* “Nonunions: What we know and can we predict them?” Chinese Orthopaedic Association. Zhuhai, China November 16, 2017.
* “Evolving Technique Update: The Subtrochanteric Femur Fracture: 5 Tips in 5 Minutes” OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* “Pro: Antegrade Rodding is Quick, Efficient with Few Complications: Try It!” OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* “Bad Ankle Fractures with Soft-Tissue Injuries: Pro: Fix Them All Now! Don’t Wait!” OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* “Debate: The Posterior Malleolus: When I Fix and How I do! Pro: Almost Always Fix It!” OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* “Panel: Medial Malleolus Fixation. Pro: Sex Appeal: Long 3.5 mm Screws” OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* “Evolving Technique Update: Tips and Tricks for Proximal and Distal Tibia Fractures” OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.

2018

* “Healing, Nonunion and Reoperation After Internal Fixation of Diaphyseal and Distal Femoral Fractures: A Systematic Review and Meta-Analysis” Terhoeve C, Nomides R, Zura R, Steen RG. Podium – Presenter C. Terhoeve; Louisiana Orthopaedic Association – Annual Meeting, New Orleans, LA. 2018.
* “Nonunions: What do we know and can we predict them?” Richard Whitehill Visiting Professor Lecture. The University of Virginia. Charlottesville, Va. February 21, 2018.
* “Distinguished Visiting Surgeons Program: Landstuhl, Germany” Richard Whitehill Visiting Professor Lecture. The University of Virginia. Charlottesville, Va. February 21, 2018.
* “Nonunions: What do we know and can we predict them?” Grand Rounds, University of Colorado, Department of Orthopaedics. May 2, 2018.
* “Nonunions: What do we know and can we predict them?” Kimbrough Moore Day – University of South Carolina – Department of Orthopaedics. Columbia, SC. May 18, 2018.
* “Distinguished Visiting Surgeons Program: Landstuhl, Germany” Kimbrough Moore Day – University of South Carolina – Department of Orthopaedics. Columbia, SC. May 18, 2018.
* “Nonunions – What do we know and can we predict them?” Twentieth Century Orthopaedics Association Annual Meeting. Nemacolin, Pa. July 26, 2018.
* “Nonunions – What do we know and can we predict them?” Osteosynthese International 2018, Annual meeting of the Kuntscher Society. Poznan, Poland. September 6-8, 2018.
* “Impact of Opioids on Fracture Non-Union” Osteosynthese International 2018, Annual meeting of the Kuntscher Society. Poznan, Poland. September 6-8, 2018.
* “Challenges and Complications in the Management of Fractures to the Foot and Ankle Secondary to Gunshot Wounds” Osteosynthese International 2018, Annual meeting of the Kuntscher Society. Poznan, Poland. September 6-8, 2018.
* “Evidence Based Literature Review of LIPUS and Non-Unions and Case Example” Osteosynthese International 2018, Annual meeting of the Kuntscher Society. Poznan, Poland. September 6-8, 2018.
* “Nonunions: What do we know and can we predict them?” Grand Rounds, University of Alabama Birmingham, Department of Orthopaedics. October 11, 2018.
* “Extreme Nailing of subtrochanteric femur fractures: tips and tricks from the expert” 55th Congreso Argentino de Ortopedia y Traumatologia: Simposio Sociedad Kutnscher International. Rosario, Argentina. December 3, 2018.
* “Extreme nailing of proximal and distal tibia: tips and tricks from the expert” 55th Congreso Argentino de Ortopedia y Traumatologia: Simposio Sociedad Kutnscher International. Rosario, Argentina. December 3, 2018.
* “Focus Lecture: How can I get this bone to heal?” 55th Congreso Argentino de Ortopedia y Traumatologia: Simposio Sociedad Kutnscher International. Rosario, Argentina. December 3, 2018.
* “The Case where I learned the most – Distal Femur” 55th Congreso Argentino de Ortopedia y Traumatologia: Simposio Sociedad Kutnscher International. Rosario, Argentina. December 3, 2018.
* “The Case where I learned the most – Humerus” 55th Congreso Argentino de Ortopedia y Traumatologia: Simposio Sociedad Kutnscher International. Rosario, Argentina. December 3, 2018.

2019

* “Femoral Neck Nonunions” Best in Orthopaedic Techniques – in association with the OTA and AAOS. New Dehli, India. September 13-14, 2019.
* “Subtrochanteric Fractures – Tips and Tricks” Best in Orthopaedic Techniques – in association with the OTA and AAOS. New Dehli, India. September 13-14, 2019.
* “Atypical Femoral Fractures – Long Term Impact of Bisphosphonate Therapy” Best in Orthopaedic Techniques – in association with the OTA and AAOS. New Dehli, India. September 13-14, 2019.
* “Extreme Nailing – Techniques and Tips in treating Distal Tibia Fractures” Best in Orthopaedic Techniques – in association with the OTA and AAOS. New Dehli, India. September 13-14, 2019.
* “Induced Membranes – The Masquelet Technique” Best in Orthopaedic Techniques – in association with the OTA and AAOS. New Dehli, India. September 13-14, 2019.
* “Osteomyelitis and Antibiotic Nails – Review, indications, and Fabrication” Best in Orthopaedic Techniques – in association with the OTA and AAOS. New Dehli, India. September 13-14, 2019.
* “Overview of Biologic Factors Impacting Nonunion and Can Nonunions be Predicted?” Best in Orthopaedic Techniques – in association with the OTA and AAOS. New Dehli, India. September 13-14, 2019.
* “Femoral Neck Nonunions” Best in Orthopaedic Techniques – in association with the OTA and AAOS. Mumbai, India. September 15-16, 2019.
* “Subtrochanteric Fractures – Tips and Tricks” Best in Orthopaedic Techniques – in association with the OTA and AAOS. Mumbai, India. September 15-16, 2019.
* “Atypical Femoral Fractures – Long Term Impact of Bisphosphonate Therapy” Best in Orthopaedic Techniques – in association with the OTA and AAOS. Mumbai, India. September 15-16, 2019.
* “Extreme Nailing – Techniques and Tips in treating Distal Tibia Fractures” Best in Orthopaedic Techniques – in association with the OTA and AAOS. Mumbai, India. September 15-16, 2019.
* “Induced Membranes – The Masquelet Technique” Best in Orthopaedic Techniques – in association with the OTA and AAOS. Mumbai, India. September 15-16, 2019.
* “Osteomyelitis and Antibiotic Nails – Review, indications, and Fabrication” Best in Orthopaedic Techniques – in association with the OTA and AAOS. Mumbai, India. September 15-16, 2019.
* Podium Presentation, Highlight Paper: “Total Hip Arthroplasty or Hemiarthroplasty for Hip Fracture.” HEALTH Investigators, Bhandari M (Presenter), Einhorn TA, Guyatt G, Schemitsch EH (presenter), **Zura RD** (Presenter), Sprague S, Frihagen F 9Presenter), Guerra-Farfán E, Kleinlugtenbelt YV, Poolman RW, Rangan A, Bzovsky S, Heels-Ansdell D, Thabane L, Walter SD, Devereaux PJ. Orthopaedic Trauma Association (OTA) Denver, Colorado. September 26, 2019.
* Podium Presentation: “Early Weight Bearing After Distal Femoral Fractures in the Elderly: A Prospective, Cohort Pilot Study.” Cannaa LK (Presenter), Bruggers JL, Jeray KJ, **Zura RD**, Tanner SL, Dawson S, Israel H. Orthopaedic Trauma Association (OTA) Denver, Colorado. September 27, 2019.
* “Update on Ankle Fractures” 14th Annual Congress of Chinese Orthopadic Association. Shanghai, China. November 14, 2019.
* “Nonunions – What we know and Can We Predict Them?” 14th Annual Congress of Chinese Orthopadic Association. Shanghai, China. November 15, 2019.

2020

* Webinar: Patient-Centric Approaches to Bone Healing: <https://www.naccme.com/program/20-wccme-201>
* “Gunshot Wounds to the Hip: Doomed to Failure?” YiY Zhang BS ; Breydan Wright BS; Peter D’ Amore MD (Presenter); Cody Hightower MD; Thomas Stang, MD; Heidi Israel PHD; Michael Tucker MD, Robert Zura MD, Lisa K. Cannada MD. Podium – Louisiana Orthopaedic Association. New Orleans, LA. March 6, 2020.
* “Patient-Centric Approaches to Bone Healing” – Advancing Orthobiologics – Virtual Symposium. Exploring Advancements in Orthobiologics for Knee Osteoarthritis and Bone Healing. <https://www.advancingorthobiologics.com/>
* “Patient-Centric Approaches to Bone Healing” Grand Rounds. UCSD (University of California San Diego) Wednesday September 2, 2020. Virtual
* “Nonunions – What do we know and can we predict them?” Grand Rounds MUSC (Medical University of South Carolina) Tuesday October 20, 2020. Virtual
* “Patient-Centric Approaches to Bone Healing” Grand Rounds. Jack Hughston Memorial Hospital. Phenix City, AL December 2, 2020. Virtual
* “Patient-Centric Approaches to Bone Healing” Grand Rounds. WellSpan York Hospital. York, pa. December 30, 2020. Virtual

**Professional awards and special recognitions:**

* Graduated with Distinction: University of Virginia, 1990
* Echols Scholar: University of Virginia, 1986-1990
* Jefferson Scholar Finalist: University of Virginia, 1986
* Lawn Resident: University of Virginia, 1989-1990
* Senate Joint Resolution 205

Sanitary Code for Public Swimming Pools

Approved, 1995

* The Gary G. Wenzelberg Memorial Lecture Award

Outstanding paper on Diagnostic Imaging of the Pelvis

Surgery of the Pelvis and Acetabulum Meeting, 1996

* Outstanding Clinical Paper

First Annual Orthopaedic Alumni Meeting

University of Virginia, 1996

* Residents Award - Best paper

Virginia Orthopaedic Society Meeting

Williamsburg, Va., 1997

* Highlight paper from Orthopaedic Trauma Association - Phoenix 2006

The Effect of Timing of Definituve Fixation for Tibial Plateau

Fractures with Associated Compartment Syndrome on Infection Rates

**Robert D. Zura, MD**, Vani Sabesan MD, Lois Ann Nichols MD, Barnaby Dedmond MD,

Patrick Leach MD, Kyle Jeray MD, William Obremskey MD, Brian Mata,

Ricardo Pietrobon, MD, PhD, MBA, Steven A Olson, MD

Presented at: Orthopaedic Trauma Association – Specialty Day

AAOS San Diego, CA. February 2007.

* Presidential Guest Lecturer New Jersey Orthopaedic Society

Great Exuma, Bahamas. March 2007

* Invited Moderator – Orthopaedic Trauma Association – Femur Section

Denver, CO. October, 2008.

* “Visitante Distinguido” (Distinguished Visitor) by Sr. Hugo Enrique Landivar Zambrana – Presidente Honorable Concejo Municipal De Santa Cruz De La Sierra. Santa Cruz, Bolivia. – 2009.
* Landstuhl Visiting Scholar Program. Landstuhl, Germany. November 13-28, 2010.
* Consultant Surgeon To NC Zoo 2009-present
* Team Physician Duke Mens Lacrosse 2010 – 2015, National Champions: 2010, 2013, 2014
* Landstuhl Visiting Scholar Program. Landstuhl, Germany. November 10-23, 2013.
* SOA/OREF Resident Award: “Decreasing Incidence of Hip Fracture in the US Medicare Population, 2005-2011” R. Andrew Henderson (presenter and resident award winner), Jonathan Godin, Benjamin Streufert, Richard Mather, **Robert Zura**. Southern Orthopaedic Association. Beaver Creek, CO. July 18, 2014.
* Visiting Professor. University of Washington Resident Research Day / Graduation. Seattle, WA. June 2016.
* Visiting Professor. LSU-Shreveport Resident Research Day / Graduation. Seattle, WA. June 15-16, 2017.
* SOA/OREF Resident Award:
	+ Nomides R. (Presenter), Steen RG, **Zura RD**. Nonunion and Reoperation Rate after Internal Fixation of Proximal Femur Fractures: A Systematic Review and Meta-analysis. Southern Orthopedic Association Annual Meeting. Hilton Head, SC.
* LOA Resident Paper Award – Second Place
	+ • “Healing, Nonunion and Reoperation After Internal Fixation of Diaphyseal and Distal Femoral Fractures: A Systematic Review and Meta-Analysis” Terhoeve C, Nomides R, **Zura R**, Steen RG. Podium – Presenter C. Terhoeve; Louisiana Orthopaedic Association – Annual Meeting, New Orleans, LA. 2018
* 2nd Annual Richard Whitehill Visiting Professor of Orthopaedic Surgery. The University of Virginia. Charlottesville, Va. February 20-21, 2018.
* AAOS Achievement Award 2108
* Visiting Professor – Kimbrough Moore Day – University of South Carolina – Department of Orthopaedics. Columbia, SC. May 17-18, 2018
* Highlight Paper Orthopaedic Trauma Association (OTA) Total Hip Arthroplasty or Hemiarthroplasty for Hip Fracture. HEALTH Investigators, Bhandari M, Einhorn TA, Guyatt G, Schemitsch EH, **Zura RD**, Sprague S, Frihagen F, Guerra-Farfán E, Kleinlugtenbelt YV, Poolman RW, Rangan A, Bzovsky S, Heels-Ansdell D, Thabane L, Walter SD, Devereaux PJ. Denver Colorado. September 26, 2019.
* “Gunshot Wounds to the Hip: Doomed to Failure?” YiY Zhang BS ; Breydan Wright BS; Peter D’ Amore MD (Presenter); Cody Hightower MD; Thomas Stang, MD; Heidi Israel PHD; Michael Tucker MD, Robert Zura MD, Lisa K. Cannada MD. Podium – Louisiana Orthopaedic Association. New Orleans, LA. March 6, 2020. First Place Resident Paper Competition.
* Visiting Professor MUSC (Medical University of South Carolina) October 20, 2020.

**Organizations and participation: (Offices held, committee assignments, etc.)**

* AO ASIF Orthopaedic Faculty – 2002 to 2018
* Orthopaedic Trauma Association

Active Member – 2005

Membership Committee 2009-2013

Research Committee 2011- 2014

International Relations Committee 2018-present

Task Force to address OTA Educational Outreach for Developed and Developing Countries 2020-present

* American Academy of Othopaedic Surgeons

(Fellow 2006) 2005

Member Trauma Evaluations Committee 2006-2012

Member Evaluations Committee 2011- 2014

Chair Trauma Instructional Course Lectures – 2016-present

Liason to Trauma Content Committee Dec 2106-present

* Eastern Orthopaedic Association – 2005-2013
* Southeastern Fracture Consortium – 2005- 2017

Member Research Committee - completed

* Piedmont Orthopaedic Society – 2006-present
* Southern Orthopaedic Association – 2008-2018
	+ Councilor – NC 2011-2018
	+ Nominating Committee 2013- 2014
	+ Board Member 2014-2018
	+ Program Chair 2017 Annual meeting
* American Orthopaedic Association 2010- present
	+ Development Committee 2013-2014
* Kuntscher Society – 2010-present
	+ Board Member 2011- present
	+ Vice President 2017- present
* Limb Lengthening Reconstruction Society – 2010-2015
* Musculoskeltal Infection Society – 2012- 2015
* Journal of Long-Term Effects of Medical Implants – Editorial Board - completed
* Consultant Reviewer - Journal of Environmental Pathology, Toxicology and Oncology - completed
* Journal of Orthopaedic Trauma – Consultant Reviewer
* Injury - Consultant Reviewer
* CORR - Consultant Reviewer
* Knee - Consultant Reviewer
* Orthopedics – Board of Editors 2017-present
* 20th Century Orthopaedic Association 2017-present

**Teaching responsibilities including continuing education:**

**Local**

* Direct Tuesday morning Orthopaedic Trauma Radiology conference with Orthopaedic Residents and medical students. (2004-2015).
* Direct and coordinate Thursday morning Orthopaedic Trauma conference and lecture series and associated labs with Orthopaedic residents and medical students. (2004-2015).
* Direct and coordinate Friday morning Emergency Orthopaedic Conference with Orthopaedic residents and medical students. (2004-2009 – this conference was incorporated into our Thursday conference after Orthopaedic educational retreat.).
* Direct and Coordinate Orthopaedic Trauma Journal Club (meets every 6 weeks) – 2004-015.
* Director of the Orthopaedic lecture series for second year Duke medical students. (2005-2013).
* Basic Fracture Care**:** Lecture given at Musculoskeletal Assessment for Primary Care Providers - Durham, NC, April 2005.
* Basic Fractures**:** Orthopaedic Trauma Class,Duke University Medical Center, Durham, NC, September 2005.
* Minimally Invasive Plate Osteosynthesis**: S**ynthes Advanced Technology Forum, Durham, NC, September 2005.
* Pilon Fractures**:** Synthes Advanced Technology Forum, Durham, NC, September 2005.
* Extra-articular Proximal Tibia Fractures**: S**ynthes Advanced Technology Forum, Durham, NC, September 2005.
* Orthopaedic Trauma:16th Annual Duke Trauma Conference – Durham, NC, March 2006.
* Tibial Non-Unions:Duke/Synthes Advanced Trauma Symposium – Durham, NC, September 2006.
* Director of Orthopaedic Trauma Fellowship (2008-present).
* Mentor to Tyler Watters (2008-9), John Backus (2008-9) (These students attend my outpatient clinic for one year as their clinical component of their third year).
* Damage Control Orthopaedics**:** 19th Annual Duke Trauma Conference. Durham, NC March, 2009.
* Management of Open Fractures: Plastic Surgery Grand Rounds, Duke University. October 21, 2009.
* Mentor to Sami Mardam-Bey (2010). (This student attends my outpatient clinic for one year as their clinical component of their third year).
* Chairman South American Orthopaedic Symposium. Duke University. November 4-6, 2010.
* Lab Instructor: Suprapatellar Tibial Nails and Sure-Shot Locking. South American Orthopaedic Symposium. Duke University, November 5, 2010.
* “Monday November 22, 2010, Landstuhl Germany” OR Staff, Nursing Grand Rounds. Wednesday September 28, 2011. Durham, NC.
* “Surgical Approaches to Pilon Fractures”: South Eastern Fracture Symposium Durham, NC. January 2012
* “Monday November 22, 2010, Landstuhl Germany” Plastic Surgery Grand Rounds. Wednesday April 18, 2012. Durham, NC.
* “Distal Tibia Fractures” Duke Orthopaedic Attending Lecture Series. August 19, 2013. Durham, NC.
* “Amputations – The Orthopaedic Perspective” Duke Trauma Workshop – DRH September 13, 2013.
* “Ankle Fractures – Are we fixing too many?” Arthrex Orthopaedic Trauma Lab – Durham, NC September 2013
* “Clavicle Fractures – Update” Arthrex Orthopaedic Trauma Lab – Durham, NC September 2013
* “Monday November 22, 2010, Landstuhl Germany” National Radiologic Technology Week – Duke Cancer Center. Wednesday November 6, 2013. Durham, NC.
* “My Landstuhl Experiences” Duke Orthopaedic Attending Lecture Series. February 17, 2014.
* Director: “Orthopaedic Military Care: Following a Virtual Patient from Injury in Afghanistan through Landstuhl to the US” Symposium. Durham July 2014
* “Our Patient’s Experience in Landstuhl” at “Orthopaedic Military Care: Following a Virtual Patient from Injury in Afghanistan through Landstuhl to the US” Symposium Durham July 2014
* “Compartment Syndrome” LSUHSC July 2016.

**Teaching responsibilities including continuing education:**

* + **Regional / National / International**

2000

* Computer Guided Placement of Iliosacral Screws Compared to Standard Fluoroscopic Technique. Kahler DM (presenter), Zura RD, Mallik K.CAOS ’00, Davos, Switzerland, 2000.

2001

* Unstable Proximal Extra-articular Tibia Fractures: A Biomechanical Evaluation of Three Methods of Fixation. Poster: Orthopaedic Trauma Association, San Diego 2001.

2002

* Tibial External Fixator Lab: Nurses Conference at Southeastern Fracture Conference, Greensboro, January 2002.
* Unstable Proximal Extra-articular Tibia Fractures: A Biomechanical Evaluation of Three Methods of Fixation. Poster: Orthopaedic Research Society, Dallas, TX, 2002.
* Trochanteric Antegrade Femoral Nailing: Our Short Term Experience. Edwards B (presenter), Lewis R, Tucker M, Zura R, Miller J. Georgia Orthopaedics – Sea Island, GA, October 2002.
* Minimally Invasive Fracture Surgery. Brooks K (presenter), Tucker M, Zura RD. Georgia Orthopaedics – Sea Island, GA, October 2002.

2003

* Trochanteric Antegrade Femoral Nailing: Our Short Term Experience. Edwards B, Lewis R (presenter), Tucker M, Zura R, Miller J. Florida Orthopaedic Society – Scientific Annual Meeting – Ponte Vedra, FL, May 2003.

2004

* Locked Plating Lab: Instructor: Orthopaedic Trauma Association, Ft. Lauderdale, FL, October 2004.
* Dynamic Compression Screw for Distal Femoral Fractures Lab: Instructor: Orthopaedic Trauma Association, Ft. Lauderdale, FL, October 2004.
* Attitudes of OTA Members Concerning the Use of Physical Forces to Aid in Fracture Healing: Georgia Orthopaedic Society – Lake Oconee, GA, October 2004.

2005

* Plate Biomechanics, Table Instructor: Synthes Perioperative Nursing Course, Myrtle Beach, SC, June 2005.
* Table Instructor, Spanning External Fixator Lab: OTA Residents Basic Fracture Course, Ottawa, Canada, October 2005.

2006

* AO ASIF Basic Principles of Operative Fracture Management Course, Table Instructor, Philadelphia, PA, January 2006.
* Table Instructor, Spanning External Fixator Lab: OTA Residents Basic Fracture Course, Phoenix, AZ, October 2006.
* Table Instructor, Tension Band / Olecranon Fractures: OTA Residents Basic Fracture Course, Phoenix, AZ, October 2006.
* Table Instructor: AO Advanced Course, Davos, Switzerland. December 2006.
* The Effect of Knee Position at the time of Torniquet Inflation on Operative Knee Range-of-Motion Robert D. Zura MD, Samuel B. Adams MD, Ricardo Pietrobon MD PhD MBA, Brian A. Mata BS (Presenter), Michael P. Bolognesi MD, Mark Easley MD, Steven A. Olson MD – Podium Presentation: NC Orthopaedic Society - Asheville, NC, October 2006.
* Computer Navigation versus Fluoroscopic Navigation for Closed Reduction in a Tibial Plateau Fracture Model. Poster: Orthopaedic Trauma Association Annual Meeting – Phoenix, AZ, October 2006.
* Comparison of Periarticular Locked Plates and Less Invasive Stabilization System Plating for Fixation of Proximal, Extra-Articular, and Bicondylar Tibial Plateau Fractures. Poster: Orthopaedic Trauma Association Annual Meeting – Phoenix, AZ, October 2006.
* Comparison of Periarticular Locked Plates and Less Invasive Stabilization System Plating for Fixation of Proximal, Extra-Articular, and Bicondylar Tibial Plateau Fractures. Poster: Georgia Orthopaedic Society, Sea Island, GA, October 2006.
* The Effect of Timing of Definitive Fixation for Tibial Plateau Fractures with Associated Compartment Syndrome on Infection Rates Poster: Georgia Orthopaedic Society, Sea Island, GA, October 2006.
* Comparison of Periarticular Locked Plates and Less Invasive Stabilization System Plating for Fixation of Proximal, Extra-Articular, and Bicondylar Tibial Plateau Fractures. Poster: Eastern Orthopaedic Association. Boca Raton, FL, October 2006.
* The Effect of Timing of Definitive Fixation for Tibial Plateau Fractures with Associated Compartment Syndrome on Infection Rates Poster: Eastern Orthopaedic Association. Boca Raton, FL, October 2006.
* Discussion Group Leader – Periarticular Fractures: AO Advanced Course, Davos, Switzerland. December 2006.

2007

* Comparison of Periarticular Locked Plates and Less Invasive Stabilization System Plating for Fixation of Proximal, Extra-Articular, and Bicondylar Tibial Plateau Fractures. Poster: AAOS San Diego, CA, February 2007.
* Computer Navigation versus Fluoroscopic Navigation for Closed Reduction in a Tibial Plateau Fracture Model. Poster: AAOS San Diego, CA, February 2007.
* Humerus Shaft Acute Fixation and Nonounions: Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN September 21-22, 2007. (SAIF: **S**urgical **A**pproaches for **I**nternal **F**ixation. It is a lecture and cadaver dissection course for Orthopaedic residents.) Faculty member 2007-present.
* Humerus: Anterolateral and Posterior Approach Demo: Surgical Approaches for Internal Fixation (SAIF) Advanced Course, Memphis, TN September 21-22, 2007.
* Table Instructor:Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN. September 21 – 22, 2007.
* Subtrochanteric Femur Fractures:International Trauma Symposia, Aventura, FL. September, 2007.
* Surgical Approches to the Foot and Ankle: International Trauma Symposia, Aventura, FL. September, 2007.

2008

* Table Instructor: Surgical Approches for Internal Fixation(SAIF) Memphis, TN. November 20-21, 2008.

2009

* Biomechanics of Locked Plating: Science Summit, San Francisco, California. May 2009.
* Case Studies – Nonunion: Science Summit, San Francisco, California. May, 2009.
* Moderator: Eastern Orthopaedic Association, Nassau, Bahamas. June, 2009.
* Table Instructor:Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN. September 18-19, 2009.
* Distal Femur Fractures:Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN. September 18, 2009.

2010

* Table Instructor:Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN. Feb 5-6, 2010.
* Distal Femur Fractures:Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN. Feb 5, 2010.
* Locked Plates in the Biologic Era: How they Work Smith-Nephew Science Summit Phoenix, Az. April 9, 2010
* Nonunions: Risk Factors and Treatment: Smith-Nephew Science Summit Phoenix, Az. April 9, 2010
* Table Instructor: Calcaneal Fixation: Smith-Nephew Science Summit Phoenix, Az. April 9, 2010
* Moderator: Trauma Section. Southern Orthopaedic Association, Puerto Rico. June, 2010.
* Nonunions: Risk Factors and Treatment: Smith-Nephew Science Summit Boston, MA. June 25, 2010
* Nonunions: Risk Factors and Treatment: Wilmington, NC. Sept. 16, 2010
* Table Instructor:Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN. Sept. 24-25, 2010.
* Distal Femur Fractures:Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN. Sept. 24-25, 2010.
* Kaufman AM, Mather RC (Presenter), Orlando L, Bolognesi MP, Olson SA, Zura RD. “Cost Effectiveness Analysis of Implant Selection in the Treatment of Extracapsular Hip Fractures. Podium North Carolina Orthopaedic Association. Oct 8-10 2010.
* Kaufman AM, Mather RC, Orlando L, Bolognesi MP, Olson SA, Zura RD. “Cost Effectiveness Analysis of Implant Selection in the Treatment of Extracapsular Hip Fractures. Poster: Annual Meeting of the Orthopaedic Trauma Association, Baltimore, MD. Oct 10-13 2010.
* Dr. Nousiainen, Dr. Omoto, Dr. Zingg, Dr. Carnahan, Dr. Kiss, Dr. Weil, Dr. Mardam-Bey, Dr. Eward, Dr. Zura, Dr. Kreder, and Dr. Helfet. Training Femoral Neck Screw Insertion Skills to Surgical Trainees: Computer-Assisted Surgery Versus Conventional Fluoroscopic Technique" Poster: Orthopaedic Trauma Association Baltimore, MD, Oct., 2010.
* Kaufman AM, Mather RC, Orlando L, Bolognesi MP, Olson SA, Zura RD. “Cost Effectiveness Analysis of Implant Selection in the Treatment of Extracapsular Hip Fractures. Poster: 1st Annual AONA Challenges in Fracture Care Across Disciplines Meeting, Phoenix, Az. Nov 11-14 2010

2011

* Table Instructor:Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN. Feb. 4-5, 2011.
* Compartment Syndrome:Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN. Feb. 5, 2011.
* Dr. Nousiainen (presenter), Dr. Omoto, Dr. Zingg, Dr. Carnahan, Dr. Kiss, Dr. Weil, Dr. Mardam-Bey, Dr. Eward, Dr. Zura, Dr. Kreder, and Dr. Helfet. Training Femoral Neck Screw Insertion Skills to Surgical Trainees: Computer-Assisted Surgery Versus Conventional Fluoroscopic Technique" Podium: Innovations in Medical Education conference in Pasadena, Sat March 12, 2011.
* “How do I know when a Fracture is Healed?” Smith-Nephew Science Summit Miami, FL, March 18, 2011.
* “Where does Ultrasound fit in? Evidence for Bone Stimulators in Fractures.” Smith-Nephew Science Summit Miami, FL, March 18, 2011.
* “NonUnions – Risk Factors and Treatment Options” Smith-Nephew Science Summit Miami, FL, March 18, 2011.
* Table Instructor:Surgical Approaches for Internal Fixation (SAIF) Advanced Course New Orleans, LA. May 20-21, 2011.
* Compartment Syndrome:Surgical Approaches for Internal Fixation (SAIF) Advanced Course. New Orleans. LA. May 21, 2011.
* “NonUnions – Risk Factors and Treatment Options” Smith-Nephew Science Summit San Francisco, CA. June 3, 2011.
* “Exogen – Practical Tips and Tricks” Smith-Nephew Science Summit San Francisco, CA. June 3, 2011.
* Kaufman AM, Mather RC, Orlando L, Bolognesi MP, Olson SA, Zura RD. “Cost Effectiveness Analysis of Implant Selection in the Treatment of Extracapsular Hip Fractures. Poster: American Orthopaedic Association Boston, MA. June, 2011.
* Kaufman AM (Presenter), Mather RC, Orlando L, Bolognesi MP, Olson SA, Zura RD. “Cost Effectiveness Analysis of Implant Selection in the Treatment of Extracapsular Hip Fractures. Podium. Southern Orthopaedic Association Hawaii, July 21, 2011.

2012

* “Tibia Fractures” Smith-Nephew Global Sales Meeting Miami, FL. January 20, 2012.
* Table Instructor:Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN March 30-31, 2012.
* “Compartment Syndrome”:Surgical Approaches for Internal Fixation (SAIF) Advanced Course. Memphis, TN March 30-31, 2012.
* “Tibia Fractures” Masters Fractures Forum. Huntington Beach, CA. May 2012
* Table Instructor: Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN September, 2012.
* “Compartment Syndrome”: Surgical Approaches for Internal Fixation (SAIF) Advanced Course. Memphis, TN September, 2012.
* “Nailing Techniques in the Tibia:” Lower Extremity Masters Course. Davos, Switzerland December, 2012
* Table Instructor: Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN December, 2012.
* “Compartment Syndrome”: Surgical Approaches for Internal Fixation (SAIF) Advanced Course. Memphis, TN December, 2012.
* Chairman: Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN December, 2012.
* Co-Chairman: TREW (Trauma, Reconstruction, Endoscopy, Wound) Course. Durham, NC December 2012
* InterTan Live cadaver Demonstration Lab: TREW (Trauma, Reconstruction, Endoscopy, Wound) Course. Durham, NC December 2012
* Moderator Trauma Section: TREW (Trauma, Reconstruction, Endoscopy, Wound) Course. Durham, NC December 2012
* Moderator Severe Open Fractures and Soft Tissue Coverage Problems Module: Lower Extremity Masters Course. Davos, Switzerland December, 2012
* Moderator Discussion Group – Distal Tibia and Pilon: Lower Extremity Masters Course. Davos, Switzerland December, 2012
* Moderator Discussion Group – Severe Open Fractures and Soft Tissue Coverage Problems:Lower Extremity Masters Course. Davos, Switzerland December, 2012
* Moderator Discussion Group – Proximal Femoral Injuries: Lower Extremity Masters Course. Davos, Switzerland December, 2012
* Moderator Discussion Group – Proximal Tibial Injuries: Lower Extremity Masters Course. Davos, Switzerland December, 2012
* Moderator Discussion Group – Distal Femoral Fractures: Lower Extremity Masters Course. Davos, Switzerland December, 2012
* Moderator Discussion Group – Hindfoot, Midfoot, and Forefoot fractures: Lower Extremity Masters Course. Davos, Switzerland December, 2012
* Moderator Discussion Group – Lower Extremity Fractures With Difficult Problems: Lower Extremity Masters Course. Davos, Switzerland December, 2012

2013

* “Moderator – Osteomyelitis Section: South Eastern Fracture Consortium, Charleston, SC. February 2013.
* “Moderator DVT and PE section”: South Eastern Fracture Consortium, Charleston, SC. February 2013.
* Chairman: Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN March 2013.
* Table Instructor: Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN March 2013.
* “Compartment Syndrome”:Surgical Approaches for Internal Fixation (SAIF) Advanced Course. Memphis, TN March 2013.
* “Surgical Approaches for Semi-extended nailing”: Surgical Approaches for Internal Fixation (SAIF) Advanced Course. Memphis, TN March 2013.
* “Medical Volunteering – Landstuhl”: Mercer University School of Medicine – Orthopaedic Interest Group – Savannah Campus. March 2013
* “The Orthopaedic Match: Strategies for Success”: Mercer University School of Medicine – Orthopaedic Interest Group – Savannah Campus. March 2013
* “Ankle Fractures” Masters Fractures Forum. Huntington Beach, CA. May 2013
* “Compartment Syndrome”:Surgical Approaches for Internal Fixation (SAIF) Advanced Course. Memphis, TN July 2013.
* “Surgical Approaches for Semi-extended nailing”: Surgical Approaches for Internal Fixation (SAIF) Advanced Course. Memphis, TN July 2013.
* Table Instructor: Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN July 2013.
* “Compartment Syndrome”:Surgical Approaches for Internal Fixation (SAIF) Advanced Course. Memphis, TN September 2013.
* Table Instructor: Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN September 2013

2014

* “Proximal Tibia Fractures” Masters Fractures Forum. Huntington Beach, Ca. May 2014
* Moderator – Small Group Discussion – Reduction Techniques – Concepts and Applications: AO Trauma Course – Advanced Principles of Fracture Management. Guangzhou, China June 14-16, 2014.
* Moderator – Small Group Discussion – Upper Extremity Fractures – Decision Making and Methods of Stabilization: AO Trauma Course – Advanced Principles of Fracture Management. Guangzhou, China June 14-16, 2014.
* Moderator – Small Group Discussion – Fractures of the Femur: AO Trauma Course – Advanced Principles of Fracture Management. Guangzhou, China June 14-16, 2014.
* Moderator – Small Group Discussion – Fractures of the Tibia, Ankle, and Foot: + AO Trauma Course – Advanced Principles of Fracture Management. Guangzhou, China June 14-16, 2014.
* Moderator – Practical Exercise – Fixation of a Type 13-C1 Fracture in the Distal Humerus using a Locking Compression Plate (LCP): AO Trauma Course – Advanced Principles of Fracture Management. Guangzhou, China June 14-16, 2014.
* “Decreasing Incidence of Hip Fracture in the US Medicare Population, 2005-2011” R. Andrew Henderson (presenter), Jonathan Godin, Benjamin Streufert, Richard Mather, Robert Zura. Southern Orthopaedic Association. Beaver Creek, CO. July 18, 2014.
* “Is the Treatment Practice for Femoral Neck Fractures in Medicare patients Changing in the United States?” Tyler Watters (presenter), Jonathan Godin, R. Andrew Henderson, Benjamin Streufert, Samuel Wellman, David Attarian, Robert Zura, Michael Bolognesi. Southern Orthopaedic
* “Repair of Intertrochanteric Hip Fracture: Cephalomedullary Nail Predominates Over Dynamic Hip Screw” Benjamin Streufert (presenter), R. Andrew Henderson, Jonathan Godin, Richard Mather, Robert Zura. Southern Orthopaedic Association. Beaver Creek, CO. July 18, 2014.
* “Use of a Concentrated Bone Marrow Aspirate for Nonunions and Bone Defects of the femur and Tibia” Robert Zura, Alexander Vap (presenter), Kristoff Reid. Southern Orthopaedic Association. Beaver Creek, CO. July 19, 2014.
* Table Instructor: Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN July, 2014.
* “Compartment Syndrome”: Surgical Approaches for Internal Fixation (SAIF) Advanced Course. Memphis, TN July 2014.
* Moderator Proximal Femur Section: Osteosynthese International 2014 “Nails and More.” Krems, Austria. September 2014.
* “Heal rate in 4,190 fresh fractures treated with low-intensity pulsed ultrasound (LIPUS)”: Zura RD, Mehta S, Della Rocca G, Jones J, Steen RG. Poster. International Society for Pharmacoeconomics and Outcomes Research. Amsterdam. November 2014.

2015

* Table Instructor: Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN Feb. 2015.
* “Compartment Syndrome”: Surgical Approaches for Internal Fixation (SAIF) Advanced Course. Memphis, TN Feb. 2015.
* “Proximal Femoral Fractures” Masters Fractures Forum. Huntington Beach, Ca. April 2015.
* “Moderator: Femoral Fractures – From Top to Bottom” Southern Orthopaedic Association. Asheville, NC. July18, 2015.
* “Predictors of Failure for Delayed Surgical Treatment of Closed Ankle Fracture-Dislocations” Andrew Matson (presenter), Robert D. Zura Southern Orthopaedic Association. Asheville, NC. July16, 2015.
* “The Effect of Computer-Assisted Surgery Training in the Placement of Iliosacral Screws” Elizabeth Hubbard, Erika Templeton (presenter), William Eward, Markku Nousiainen, Robert Zura. Southern Orthopaedic Association. Asheville, NC. July17, 2015.

2016

* Moderator Symposium: Syndesmotic Injuries. South Eastern Fracture Symposium. Durham, North Carolina. January 29, 2016.
* “The epidemiology of fracture nonunion in 18 human bones: Analysis of a payer database that includes ~90.1 million patients” R Zura, Z Xiong, T Einhorn, JT Watson, RF Ostrum, MJ Prayson, GJ Della Rocca, T McKinley, S Mehta, Z Wang, RG Steen. Poster at ORS. Orlando, FL. March 2016
* “Impact of medication use on fracture nonunion in human bones: Analysis of a payer database of ~90.1 million patients” R Zura, Z Xiong , T Einhorn , JT Watson, MJ Prayson, GJ Della Rocca, T McKinley, S Mehta, Z Wang , RG Steen. Poster at ORS. Orlando, FL. March 2016
* “Acute Inflammatory Response After Severe Joint Injury Potentially Involved in the Development of Post-traumatic Arthritis” Janet L Huebner, Bridgette D Furman, Maria J Manson, Kelly A Kimmerling, Steven A Olson, Farshid Guilak, Louis DeFrate, Robert D Zura, Rachel M Reilly and Virginia Byers Kraus. Poster at OARSI (**Osteoarthritis Research Society International)** Amsterdam. March 2016.
* “Lipus: Clinical Data” University of Virginia Department of Orthopaedics. Charlottesville, Va. May 4, 2016.
* Chair: Bioventus Science Summit. Chicago, IL. June 10, 2016.
* “Predicting Nonunion” Discussion sessions, moderator. Bioventus Science Summit. Chicago, IL. June 10, 2016.
* Matson AP(Presenter), Morwood MM, Peres-Da-Silva A, Cone EB, Hurwitz SR, Zura RD. “Obesity predicts lower risk of wound complications following open reduction and internal fixation of ankle fractures.” Poster presented at the American Orthopaedic Foot and Ankle Society Annual Meeting. July 2016.
* Moderator: GENERAL SESSION: Foot & Ankle, Trauma and Tumor. Southern Orthopaedic Association. Naples, FL. July 29, 2016.
* Moderator: RAPID FIRE SESSION: Trauma. Southern Orthopaedic Association Naples, FL. July 29, 2016.
* Matson AP (presenter), Morwood MM, Peres-Da-Silva A, Cone EB, Hurwitz SR, Zura RD. “Obesity predicts lower risk of wound complications following open reduction and internal fixation of ankle fractures.” Southern Orthopaedic Association Annual meeting. July 2016, Naples, FL.
* “Lipus: Clinical Data and Basic Science” University of Texas San Antonio Department of Orthopaedics. San Antonio, TX. August 25, 2016.
* “Compartment Syndrome”: Surgical Approaches for Internal Fixation (SAIF) Advanced Course. Memphis, TN September 2016.
* Table Instructor: Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN September, 2016.
* Chair: AAOS-IOA: 3rd Trauma Conclave, New Dehli, India. September 16-17, 2016.
* Moderator: Foot and Ankle Session: AAOS-IOA: 3rd Trauma Conclave New Dehli, India. September 16, 2016.
* Moderator: Infection Session: “Exterminator Video”: AAOS-IOA: 3rd Trauma Conclave New Dehli, India. September 17, 2016.
* Chair: AAOS-IOA: 3rd Trauma Conclave, Goa, India. September 19-20, 2016.
* Moderator: Infection Session: AAOS-IOA: 3rd Trauma Conclave, Goa, India. September 20, 2016.
* Moderator: Session I – Nail vs. Plate vs. Prosthesis: Tibia. Gerhard Kuntscher Society Annual Meeting. Osteosynthese International 2016. Aschaffenburg, Germany. September 22, 2016.
* Poster: “Impact of Medication Use on Fracture Nonunion in Human Bones – Analysis of a Payer Database ~ 90.1 million Patients”: RG Steen, Z Xiong, T Einhorn, JT Watson, MJ Prayson, GJ Della Rocca, T McKinley, S Mehta, Z Wang, RD Zura. Gerhard Kuntscher Society Annual Meeting. Osteosynthese International 2016. Aschaffenburg, Germany. September 22-24, 2016.
* Moderator: Papers With Discussion Session: 104th Annual Meeting of the Clinical Orthopaedic Society. New Orleans, LA. October 1, 2016.
* Zura RD , Xiong Z, Einhorn T, Watson JT, Ostrum RF, Prayson MJ, Della Rocca GJ, Mehta S, McKinley T, Wang Z, Steen RG. Epidemiology of Fracture Nonunion in 18 Human Bones. Poster: Orthopaedic Trauma Association Annual Meeting. Washington, D.C. October 7, 2016.
* “Case Introductions and Resolutions” Advances in Bone Healing Summit. Phoenix, AZ. October 14, 2016.
* Moderator: Breakout Session: “Predicting Fracture Nonunion” Advances in Bone Healing Summit. Phoenix, AZ. October 14, 2016.
* “Lipus: Clinical Data and Basic Science” The CORE Institute Department of Orthopaedics. Phoenix, AZ. December 5, 2016.

2017

* “Compartment Syndrome”: Surgical Approaches for Internal Fixation (SAIF) Advanced Course. Memphis, TN. February, 2017.
* Table Instructor: Surgical Approaches for Internal Fixation (SAIF) Advanced Course Memphis, TN. February, 2017.
* “Impact of Chronic Analgesic Use on Fracture Nonunion” RG Steen, R Zura, T Buchheit, Z Wang, S Mehta, G Della Rocca Poster Orthopaedic Research Society (ORS) San Diego, CA. March 2017.
* “Tibial Shaft Fractures” Masters Fractures Forum. Huntington Beach, Ca. April 2017.
* Moderator: Medical Education Board. April 27, 2017 – Amsterdam
* “Share Best Practices:” Medical Education Board. April 27, 2017 – Amsterdam
* “Improvement of Medical Education:” Medical Education Board. April 27, 2017 – Amsterdam
* Chair: “International Science Summit” April 28, 2017 – Amsterdam
* Moderator: “Breakout Round Table Case Discussions” International Science Summit. April 28, 2017 – Amsterdam
* Mack C, Pavesio A, Kelly K, Wester T, Jones J, Maislin G, Irwin D, Brinkley E, Zura RD. Making the Most of External Comparators: A Study of Fracture Healing in Patients at Risk of Non-Union. Poster. ISPOR 22nd Annual International Meeting, Boston, MA, 21-25 May, 2017.
* Terhoeve C, Nomides R, Steen RG, Zura RD. Healing, Nonunion, and Reoperation after Internal Fixation of Diaphyseal and Distal Femoral Fractures: A Systematic Review and Meta-Analysis.” American Orthopedic Association Annual Leadership Meeting. Charlotte, NC. Poster
* Nomides R, Steen RG, Zura RD. Healing, Nonunion, and Reoperation after Internal Fixation of Proximal Femoral Fractures: A Systematic Review and Meta-Analysis. American Orthopedic Association Annual Leadership Meeting. Charlotte, NC. Poster
* Moderator: General Session 1 – Resident Awards. Southern Orthopaedic Association. Hilton Head Island, SC. June 29, 2017.
* Nomides R. (Presenter), Steen RG, Zura RD. Nonunion and Reoperation Rate after Internal Fixation of Proximal Femur Fractures: A Systematic Review and Meta-analysis. Southern Orthopedic Association Annual Meeting. Hilton Head, SC.
* Nomides R. (Presenter), Terhoeve C, Steen RG, Zura RD. / Nomides R (2017). Diaphyseal and Distal Femur Fracture Complications: Systematic Review and Meta-Analysis. Southern Orthopedic Association Annual Meeting. Hilton Head, SC.
* Mack C, Pavesio A, Kelly K, Wester T, Jones J, Maislin G, Irwin D, Brinkley E, Zura RD. Breaking News: Study of Fracture Healing in Patients at Risk of Non-Union. Poster. 33rd ICPE: International Conference on Pharmacoepidemiology & Therapeutic Risk Management, Montreal, Canada, August 23-27, 2017.
* Chair – Session III – Pediatric. Gerhard Küntscher Society Annual Meeting: Osteosynthese International 2017. Munich, Germany. September 13-15, 2017.
* Trauma Co-Chair: OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* Moderator Debate: Treatment of Intertrochanteric Femur Fractures, How I Treat: Timing, Anti-coagulation and 1 Year Later. OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* Moderator: Subtrochanteric Fractures. OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* Moderator: Case Presentations with Questions and Answers – Femur. OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* Panel – Wrap Up and Case Presentations: Potpourri Trauma – Lightening Round Fractures. OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* Moderator: Midfoot and Hindfoot Trauma. OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* Moderator: Bad Ankle Fractures with Soft Tissue Injuries. OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* Panel Moderator: When do I fix Open Versus Closed Complex Injuries and How. OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* Panel Moderator: 42 year old Motorcycle Rider Caught under an 18 Wheeler with a Complex Pilon. OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* Moderator: Case Presentations with Questions & Answers – Pediatric Tibia, Distal Tibia, Pilon, Syndesmosis, Complications. OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* Moderator: The Tibia from Top to Bottom. OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* Debate Moderator: 45 year old Driver of a MVA Now with a Schatzker IV and Presumed Knee Dislocation. OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* Debate Moderator: 65 year old Menopausal Woman with a Proximal Humeral Fracture. OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.
* Co-Moderator: Panel Discussion: Wrap up & Summary. OSET Orthopaedic Summit Evolving Techniques 2017. Las Vegas, NV. December 6-7, 2017.

2018

* Impact of analgesics and other common medications on fracture healing: An inception cohort study

Zura R, Buchheit T, Steen G, Mehta S, Della Rocca G, Wang Z. Poster. Louisiana Orthopaedic Association – Annual Meeting, New Orleans, LA. 2018

* Healing, Nonunion, and Reoperation after Internal Fixation of Proximal Femur Fractures: A Systematic Review and Meta-analysis. Nomides R, Terhoeve C, Steen G, Zura R. Poster. Louisiana Orthopaedic Association – Annual Meeting, New Orleans, LA. 2018
* Cost Savings Using Generic Small Fragment Plating in Lateral Malleolus Ankle Fractures at a Level I Trauma Center. Royals T, Zura R. Poster. Louisiana Orthopaedic Association – Annual Meeting, New Orleans, LA. 2018
* Risk factors for nonunion of bone fracture in pediatric patients. Zura R, Kaste S, Heffernan M, Accousti B, Gargiulo D, Wang Z, Steen G. Poster. Louisiana Orthopaedic Association – Annual Meeting, New Orleans, LA. 2018
* Koso, R. (Presenter), Steen, R.G., & Zura, R. (April, 2018). Proximal Femur Fracture Complications: A Systematic Review and Meta-Analysis. Podium Presentation at: Mid-America Orthopaedic Association (MAOA) Annual Meeting; San Antonio, TX, USA.
* Terhoeve, C. (Presenter), Koso, R., Steen, R.G., & Zura, R. (April, 2018). Healing, Nonunion, and Reoperation After Internal Fixation of Distal and Diaphyseal Femoral Fractures: A Systematic Review and Meta-Analysis. Podium Presentation at: Mid-America Orthopaedic Association (MAOA) Annual Meeting; San Antonio, TX, USA.
* Buchheit, T., Zura, R., Wang, Z., Mehta, S., Della Rocca, G., Terhoeve, C., Steen, G. (June, 2018). Opioid Exposure is Associated with Nonunion Risk in Traumatically Injured Patients: An Inception Cohort Study. Poster presented at: American Orthopaedic Association (AOA) Annual Meeting; Boston, MA, USA. June 2018.
* Moderator: Session I – Proximal and Distal Tibia Fracture: Osteosynthese International 2018, Annual meeting of the Kuntscher Society. Poznan, Poland. September 6-8, 2018.
* Moderator: Session VI – Calcaneal Fracture – Part II – Mario Goldzak in Memoriam: Osteosynthese International 2018, Annual meeting of the Kuntscher Society. Poznan, Poland. September 6-8, 2018.
* Poster – Klatman S, Neary J, lambert T, Zura R. “Timing of Fixation for Distal Radius Fractures” Osteosynthese International 2018, Annual meeting of the Kuntscher Society. Poznan, Poland. September 6-8, 2018.
* Panel – Complex Femoral Fractures – Case based approach. 55th Congreso Argentino de Ortopedia y Traumatologia: Simposio Sociedad Kutnscher International. Rosario, Argentina. December 3, 2018.
* Panel – Avoiding complications in lower limb fractures. 55th Congreso Argentino de Ortopedia y Traumatologia: Simposio Sociedad Kutnscher International. Rosario, Argentina. December 3, 2018.

2019

* Symposium Moderator: “Tibia Fractures from Top to Bottom: A Case Based Discussion” Louisiana Orthopaedic Association. New Orleans, La. February 15, 2019.
* Moderator: Bioventus Orthobiologics Summit. Alexandria, Va. April 5, 2019.
* “Factors That Impact Bone Healing” Bioventus Orthobiologics Summit. Alexandria, Va. April 5, 2019.
* “LIPUS: The Totality of the Evidence” Bioventus Orthobiologics Summit. Alexandria, Va. April 5, 2019.
* Breakout Session: Real World Scenarios: Fracture Case Review. Bioventus Orthobiologics Summit. Alexandria, Va. April 5, 2019.
* “Exogen and Fracture Healing” 17th Annual Trauma 101: Fracture Care for the Community Orthopedist and Orthopaedic PA & NP. Clearwater, Fl. April 26, 2019.
* “Nonunions – Review of literature, Epidemiology, and Prediction” Edmonton, Canada. May 23. 2019.
* “Lipus – Review of MOA and Clinical data and case reviews” Edmonton, Canada. May 23, 2019.
* “Lipus – Acute Fracture Cases and Acute Fracture Literature, and Brief Overview” Vancouver, Canada. May 24, 2019.
* “Exogen and Fracture Healing” 20th Annual Conference – Orthopaedics in the Lone Star State – PAOS. August 28, 2019.
* Course Director: Best in Orthopaedic Techniques – in association with the OTA and AAOS. New Dehli, India. September 13-14, 2019.
* Course Director: Best in Orthopaedic Techniques – in association with the OTA and AAOS. Mumbai, India. September 15-16, 2019.
* Moderator: Paper session VII: International Trauma Care Forum at the Orthopaedic Trauma Association. Denver, Colorado. September 26, 2019.

2020

* “Exogen and Fracture Healing” Louisville, KY. March 2, 2020.
* Moderator: Advancing Orthobiologics – Virtual Symposium. Exploring Advancements in Orthobiologics for Knee Osteoarthritis and Bone Healing. <https://www.advancingorthobiologics.com/>
* Visiting Professor MUSC (Medical University of South Carolina) Case Reviews, resident Questions and Dr. Reid Question and Answer session. October 20, 2020.

**Areas of research interests (basic and applied) - list:**

* Outcomes of Fracture Management
* Bone Stimulators
* Biomechanics of Orthopaedic fixation

External support (past and present) - gifts, grants, and contracts:

a) Past:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PI | %Effort | Purpose | Amount | Duration |
| Beau Sasser  | N/A | Bone Growth Stimulator Survey  | $1,250.00  | 1-2 years |
| Zura | N/A | The Effect of Knee Position at the time of Torniquet Inflation on Operative Knee Range-of-Motion | $10,000 – Zimmer |  |
| Zura | N/A | Comparison of Periarticular Locked Plates and Less Invasive Stabilization System Plating for Fixation of Proximal, Extra-Articular, and Bicondylar Tibial Plateau Fractures | $12,000 – Synthes  |  |
| Zura | N/A | Pro00016423 Training Femoral Neck Screw Insertion Skills to Surgical Trainees: Computer- Assisted Surgery Versus Conventional Fluoroscopic TechniqueSponsor: GME Grant | $9000 | 07/01/2009-06/01/2011 |
| Zura | N/A | eIRB: Pro00007202A Randomized, Placebo-Controlled Study to Evaluate the Efficacy, Safety and Tolerability of CP-533,536 in Subjects with a Closed Fracture of the Tibial Shaft (A3241010) Sponsor: Pfizer  | $154,806 | **2/1/2008– 1/31/2013** |
| Zura | N/A | Pro00009075 Clinical Efficacy and Cost Implications of Acute BMP-2 Application in Grade III Tibia Fractures: A Prospective Randomized Multi-Center Study  | $19,000 | 07/01/2005-12/31/2010 |
| Zura | N/A | Pro00001409 A Retrospective Review of the Value of the Tip-Apex Distance in Predicting Failure of Fixation in Peritrochanteric Femur Fractures Treated with a Helical Blade-Nail Device |  | 05/01/2007-05/01/2011 |
| Zura | 1% | eIRB: Pro00012273  Standard Reaming versus Reaming/Irrigating/Aspirating for Intramedullary Nailing of Femoral Shaft Fractures (S.T.A.F.F)Sponsor: Greensville Hospital System  | $55,974 | 10/1/2008– 9/30/2012 |
| Zura | 1% | eIRB: Pro00021501 Retrospective Study of GRADE IIIB Open Fractures-Does vacuum-assisted closure allow for (>72hours) delayed flap coverage? | $2,500 | 12/31/2009- 12/31/2013 |
| Zura | N/A | eIRB: Pro00008160  Outcomes after Treatment of Femoral Head Fractures (Retrospective Study)Sponsor: Carolinas Healthcare Systems | $500 | **9/01/2008– 08/30/2012** |

b) Present:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PI | %Effort | Purpose | Amount | Duration |
| Zura | 1% | eIRB: Pro00015940 Flow: Fluid Lavage of Open Wounds: A Multi-Center, Blinded, Factorial Trail Comparing Alternative Irrigating Solutions and Pressures in Patients with Open Fractures Sponsor: United States Army Institute of SurgicalResearch (OTRP) |  | 07/01/2009-06/30/2015 |
| Zura | 1% | eIRB: Pro00027697 Hip Fracture Evaluation with ALternatives of Total Hip Arthroplasty versus Hemi-Arthroplasty (HEALTH): A Multi-Centre Randomized Trial Comparing Total Hip Arthroplasty and Hemi-Arthroplasty on Revision Surgery and Quality of Life in Patients with Displaced Femoral Neck Fractures | $24,000 | 07/01/2010-06/30/2015 |
| Zura | 1% | eIRB: Pro00032198 A Prospective Randomized Trial to Assess Fixation Strategies for Severe Open Tibia Fractures: Modern Ring External Fixators vs. Internal Fixation (FIXIT Study)-US Department of Defense-METRC | $35,000 | 02/01/2012-01/31/2016 |
| Zura | 1% | eIRB: Pro00035216 Assessment of Severe Extremity Wound Bioburden at the Time of Definitive Wound Closure or Coverage: Correlation with Subsequent Post-Closure Deep Wound Infection- US Department of Defense-METRC | $25,000 | 02/01/2012-01/31/2016 |
| Zura | 1% | eIRB: Pro00040026 The Effect of Computer-Assisted Surgery Training In The Placement Of Sacroiliac Screws By Orthopaedic Surgery Residents. | $10,000 | 02/01/2013-01/31/2014 |
| Zura | 1% | eIRB: Pro00051952 Outcomes Following Severe Distal Tibia, Ankle and/or Foot Trauma: Comparison of Limb Salvage vs. Transtibial Amputation Protocol (OUTLET Study)- US Department of Defense-METRC | $26,250 | 03/18/2014-03/18/2016 |
| Zura | 1% | eIRB: Pro00051954 Streamlining Trauma Research Evaluation with Advanced Measurement: STREAM Study-National Institutes of Health-METRC | $12,500 | 02/14/2014-02/10/2016 |
| OlsonCollaborator:Zura | NA | eIRB: Pro00038254 Assessment of Biomarkers Associated with Joint Injury and Subsequent Post-Traumatic Arthritis (US Department of Defense) |  | 07/11/2012-07/11/2015 |
| OlsonCollaborator:Zura | NA | Pro00043568 Does Residual Displacement On Standard Radiographic Views Correlate with Pelvic Ring Injury Clinical Outcome? |  | 04/08/2013-04/08/2016 |

Funder: Canadian Institutes of Health Research

Grant title: Advancing the Care of Patients with Musculoskeletal Injuries Worldwide through Multi-National Research Initiatives

 Amount: $6,943,280

 Duration: July 1, 2016 – June 30, 2024