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12/2018

 **Ira Zaltz, M.D**

Beaumont Hospital Michigan Orthopaedic Surgeons

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**Education and Training**

**Education**

5/1986 Vanderbilt University, Nashville, TN, B.A.

5/1990 University of Pennsylvania School of Medicine, Philadelphia, PA, M.D

**Postgraduate Training**

7/1990-6/1991 Massachusetts General Hospital, Boston, MA, Postgraduate Surgical Internship

6/1991-12/1995 Harvard Combined Program in Orthopaedic Surgery, Boston, MA, Orthopaedic Residency

7/1994-12/1994 Beth Israel Hospital, Boston, MA, Orthopaedic and Biomechanical

 Research

1/1996-6/1996 Massachusetts General Hospital, Boston, MA, Department of Orthopaedic Surgery, Chief Resident

**Fellowship**

6/1996-7/1997 Texas Scottish Rite Hospital for Children, Dallas, TX, Pediatric Orthopaedic Surgery and Scoliosis Surgery, Fellowship

**Licensures and Certifications**

**Licensure**

2000 Michigan, #4301075486

**Certifications**

1991 Diplomate, National Board of Medical Examiners

1999 Diplomate, American Board of Orthopaedic Surgery

2007 Recertification, American Board of Orthopaedic Surgery

2018 Recertification, American Board of Orthopaedic Surgery

**Professional Positions**

7/1997-2/2000 Staff Orthopaedic Surgeon, Hope Children’s Hospital and Christ Hospital Medical Center

3/2000-present Senior Staff Surgeon, Section, Pediatric Orthopaedics, Henry Ford Health System

2/2003-present Division Head, Pediatric Orthopaedic Surgery, William Beaumont Hospital, Department of Orthopaedic Surgery

1/2012-present Director, Hip Clinic, Children’s Hospital of Michigan

**Professional Memberships**

7/1997 American Academy of Orthopaedic Surgery

7/1998 Pediatric Orthopaedic Society of North America

3/2000 Michigan Orthopaedic Society

1/2007 ANCHOR

**Hospital Committees**

2000-present Pediatric Orthopaedics, Henry Ford Hospital

2003-present Orthopaedic Education Committee, William Beaumont Hospital

**Awards and Honors**

1985 Phi Beta Kappa

1986 Merck Award in Chemistry

1990 Alpha Omega Alpha

1990 Richard G. Munns Award

2005 Best Teacher Award, Department Orthopaedic Surgery

2008 Outstanding Basic Science Paper, POSNA Annual Meeting

**Professional Development**

6/2011 Ninth Symposium on Joint Preserving and MIS of the Hip, University of Ottawa

6/2012 International Symposium on Joint Preservation and MIS of the Hip, Hospital for Special Surgery, New York, New York

7/2012 AAOS Hip Preservation in the Adolescent and Young Adult #3280

5/2013 Tenth Symposium on Joint Preserving and MIS of the Hip, University of Ottawa

12/2013 International Pediatric Orthopaedic Symposium, Orlando, Florida

2/2014 Berne Hip Symposium, Berne, Switzerland

9/2015 International Hip Arthroscopy Meeting, Cambridge, UK

2/2016 Berne Hip Symposium, University of Berne, Switzerland

1/2017 AO International Hip Symposium, Marco Island, Florida

2/2018 Berne Hip Symposium, University of Berne, Switzerland

2/2020 Berne Hip Symposium, University of Berne, Switzerland

**Publications**

**Original Papers in Peer-reviewed Journals (Principal Author)**

Zaltz I, Waters PM, Kasser J. Ulnar Nerve Instability in Children, Journal of Pediatric Orthopaedics, 16 (5), 567-569, 1996.

Zaltz I, Zhang B, Yang M, Yu C, Les C, Gibson G. Molecular Mechanisms of Staple Epiphyseodesis, Trans. Orth. Res. Soc., vol. 27, Dallas, TX, 2002.

Zaltz I, Beaule P, Clohisy J, Schoenecker P, Sucato D, Podeszwa D, Sierra R,

Trousdale R, Kim YJ, Millis MB. Incidence of deep vein thrombosis and pulmonary embolus following periacetabular osteotomy. J Bone Joint Surg Am. 2011 May;93 Suppl 2:62-5.

Zaltz I, Hosalkar H, Wenger D. What's new in pediatric orthopaedic surgery. J Bone Joint Surg Am. 2012 Feb 15;94(4):375-81.

Zaltz I, Kelly BT, Hetsroni I, Bedi A. The Crossover Sign Overestimates Acetabular Retroversion. Clin Orthop Relat Res. 2012 Nov 8. [Epub ahead of print].

Zaltz I. The biomechanical case for labral débridement. Clin Orthop Relat Res. 2012 Dec;470(12):3398-405.

Zaltz I, Leunig M. Parafoveal chondral defects associated with femoroacetabular impingement. Clin Orthop Relat Res 2012 Dec;470(12):3383-9.

Zaltz I. How to properly correct and to assess acetabular position: an evidence-based approach.J Pediatr Orthop. 2013 Jul-Aug;33 Suppl 1:S21-8.

Zaltz I. Single Incision Triple Innominate Osteotomy, Oper. Tech. Orthop. 2013 Sept; 23, 3.

Zaltz I, Kelly BT, Larson CM, Leunig M, Bedi A. Surgical treatment of femoroacetabular impingement: what are the limits of hip arthroscopy? Arthroscopy. 2014 Jan;30(1):99-110.

Zaltz I, Baca G, Kim YJ, Schoenecker P, Trousdale R, Sierra R, Sucato D, Sink E, Beaulé P, Millis MB, Podeszwa D, Clohisy JC. Complications associated with the periacetabular osteotomy: a prospective multicenter study. J Bone Joint Surg Am. 2014 Dec 3;96(23):1967-74.

Zaltz I. CORR Insights®: hips with protrusio acetabuli are at increased risk for failure after femoroacetabular impingement surgery: a 10-year followup. Clin Orthop Relat Res. 2016 Dec;474(12):2662-2663.

**Original Papers in Peer-reviewed Journals (Co-Author)**

Snyder BD, Zaltz I, Hall JE, Emans JB. Predicting the Integrity of Vertebral BoneScrew Fixation in Anterior Spinal Instrumentation, Spine, 20 (14), 1568-1574, 1995.

Snyder BD, Zaltz I, Breintenbach MA, Kido TH, Myers ER, Emans JB. Does Bracing

Affect Bone Density in Adolescent Scoliosis?, Spine, 20 (14), 1554-1560, 1995.

Craig JG, van Holsbeek M, Zaltz I. The Utility of MR in assessing Blount’s Disease, Skeletal Radiology 31:208-213, 2002.

Sink EL, Zaltz I, Heare T, Dayton M. Acetabular Cartilage and Labral Damage Observed During Surgical Hip Dislocation for Stable Slipped Capital Femoral Epiphysis. J Pediatr Orthop. 30: 2010; 26-30.

Kempton LB, Nantau WE, Zaltz I. Successful Monitoring of Transcranial Electrical Motor Evoked Potentials With Isoflurane and Nitrous Oxide in Scoliosis Surgeries. Spine (Phila Pa 1976). 2010 Jun 30. [Epub ahead of print].

Noonan K, Zaltz I, Wenger D. What’s New in Pediatric Orthopaedic Surgery, Journal of Bone and Joint Surgery-Am. 2011 Mar;93(6):597-606.

Sink EL, Beaule PE, Sucato D, Kim YJ, Millis MB, Dayton M, Trousdale RT, Sierra

RJ, Zaltz I, Schoenecker P, Monreal A, Clohisy J. Multicenter study of complications following surgical dislocation of the hip. J Bone Joint Surg Am. 2011 Jun 15;93(12):1132-6.

Bedi A, Zaltz I, De La Torre K, Kelly BT. Radiographic comparison of surgical hip dislocation and hip arthroscopy for treatment of cam deformity in femoroacetabular impingement. Am J Sports Med. 2011 Jul;39 Suppl:20S-8S.

Ross JR, Zaltz I, Nepple JJ, Schoenecker PL, Clohisy JC. Arthroscopic disease classification and interventions as an adjunct in the treatment of acetabular dysplasia. Am J Sports Med. 2011 Jul;39 Suppl:72S-8S.

Sink EL, Leunig M, Zaltz I, Gilbert JC, Clohisy J. Academic Network for

Conservational Hip Outcomes Research Group. Reliability of a Complication Classification System for Orthopaedic Surgery. Clin Orthop Relat Res. 2012 Apr 19. [Epub ahead of print].

Anekstein Y, Mirovsky Y, Arnabitsky V, Gelfer Y, Zaltz I, Smorgick Y. Reversing the concept: correction of adolescent idiopathic scoliosis using the convex rod de-rotation maneuver. Eur Spine J. 2012 May 17. [Epub ahead of print].

Nepple JJ, Larson CM, Smith MV, Kim YJ, Zaltz I, Sierra RJ, Clohisy JC. The reliability of arthroscopic classification of acetabular rim labrochondral disease. Am J Sports Med. 2012 Oct;40(10):2224-9. Epub 2012 Aug 27.

Nepple JJ, Martel JM, Kim YJ, Zaltz I, Clohisy JC; ANCHOR Study Group. Do plain radiographs correlate with CT for imaging of cam-type femoroacetabular impingement? Clin Orthop Relat Res. 2012 Dec;470(12):3313-20.

Sink E, Zaltz I; Session Participants. Report of break-out session: Management of sequelae of Legg-Calvé-Perthes disease. Clin Orthop Relat Res. 2012 Dec;470(12):3462-3.

Clohisy JC, Baca G, Beaule PE, Kim YJ, Larson CM, Millis MB, Podeszwa DA,

Schoenecker PL, Sierra RJ, Sink EL, Sucato DJ, Trousdale RT, Zaltz I; ANCHOR

Study Group. Descriptive epidemiology of femoroacetabular impingement: a north american cohort of patients undergoing surgery. Am J Sports Med. 2013 Jun;41(6):1348-56.

Millis MB, Zaltz I. Emerging concepts in slipped capital femoral epiphysis: editorial comment. Clin Orthop Relat Res. 2013 Jul;471(7):2083-4.

Sankar WN, Matheney TH, Zaltz I. Femoroacetabular Impingement: Current Concepts and Controversies. Orthop Clin North Am. 2013 Oct;44(4):575-589.

Larson CM, Kelly BT, Leunig M, Zaltz I, Clohisy JC, Regarding “Surgical Dislocation of the hip vs arthroscopic treatment of femoroacetabular impingement: a prospective matched pair study with 2-year follow up”, Arthroscopy 2014 Feb 30(2): 155-6.

Nepple JJ, Martell JM, Kim YJ, Zaltz I, Millis MB, Podeszwa DA, Sucato DJ, Sink EL, Clohisy JC; ANCHOR Study Group. Interobserver and intraobserver reliability of the radiographic analysis of femoroacetabular impingement and dysplasia using computer-assisted measurements. Am J Sports Med. 2014 Oct;42(10):2393-401.

Millis MB, Zaltz I. Current perspectives on the pediatric hip: selected topics in hip dysplasia, Perthes disease, and chondrolysis: synopsis of the hip subspecialty session at the POSNA Annual Meeting, May 1, 2013, Toronto. J Pediatr Orthop. 2014 Oct-Nov;34 Suppl 1:S36-43.

Georgiadis AG, Zaltz I. Slipped capital femoral epiphysis: how to evaluate with a review and update of treatment. Pediatr Clin North Am. 2014 Dec;61(6):1119-35.

Georgiadis AG, Siegal DS, Scher CE, Zaltz I. Can femoral rotation be localized and quantified using standard CT measures? Clin Orthop Relat Res. 2015 Apr;473(4):1309-14.

Ricciardi BF, Fabricant PD, Fields KG, Poultsides L, Zaltz I, Sink EL. What are the demographic and radiographic characteristics of patients with symptomatic extraarticular femoroacetabular impingement? Clin Orthop Relat Res. 2015 Apr;473(4):1299-308.

Larkin B, van Holsbeeck M, Koueiter D, Zaltz I. What is the impingement-free range of motion of the asymptomatic hip in young adult males? Clin Orthop Relat Res. 2015 Apr;473(4):1284-8.

Stambough JB, Clohisy JC, Baca GR, Zaltz I, Trousdale R, Millis M, Sucato D, Kim YJ, Sink E, Schoenecker PL, Sierra R, Podeszwa D, Beaulé P. Does previous pelvic osteotomy compromise the results of periacetabular osteotomy surgery? Clin Orthop Relat Res. 2015 Apr;473(4):1417-24.

Weber AE, Bedi A, Tibor LM, Zaltz I, Larson CM. The Hyperflexible Hip: Managing Hip Pain in the Dancer and Gymnast. Sports Health. 2015 Jul;7(4):346-58.

Sankar WN, Beaulé PE, Clohisy JC, Kim YJ, Millis MB, Peters CL, Podeszwa DA, Schoenecker PL, Sierra RJ, Sink EL, Sucato DJ, Zaltz I. Labral morphologic characteristics in patients with symptomatic acetabular dysplasia. Am J Sports Med. 2015 Sep;43(9):2152-6.

Matheney T, Zaltz I, Kim YJ, Schoenecker P, Millis M, Podeszwa D, Zurakowski D, Beaulé P, Clohisy J; ANCHOR Study Group. Activity level and severity of dysplasia predict age at bernese periacetabular osteotomy for symptomatic hip dysplasia. J Bone Joint Surg Am. 2016 Apr 20;98(8)665-71.

Fabricant PD, Sankar WN, Seeley MA, Beaulé PE, Clohisy JC, Kim YJ, Millis MB, Peters CL, Podeszwa DA, Schoenecker PL, Sierra RJ, Sink EL, Sucato DJ, Zaltz I. Femoral deformity may be more predictive of hip range of motion than severity of acetabular disease in patients with acetabular dysplasia: an analysis of the ANCHOR cohort. J Am Acad Orthop Surg. 2016 Jul;24(7):465-74.

Clohisy JC, Ackerman J, Baca G, Baty J, Beaulé PE, Kim YJ, Millis MB, Podeszwa DA, Schoenecker PL, Sierra RJ, Sink EL, Sucato DJ, Trousdale RT, Zaltz I. Patient-reported outcomes of periacetabular osteotomy from the prospective ANCHOR cohort study. J Bone Joint Surg Am. 2017 Jan 4;99(1):33-41.

Sankar WN, Duncan ST, Baca GR, Beaulé PE, Millis MB, Kim YJ, Peters CL, Podeszwa DA, Schoenecker PL, Sierra RJ, Sink EL, Sucato DJ, Trousdale RT, Zaltz I, Clohisy JC. Descriptive epidemiology of acetabular dysplasia: the Academic Network of Conservational Hip Outcomes Research (ANCHOR) periacetabular osteotomy. J Am Acad Orthop Surg. 2017 Feb;25(2):150-159.

Mulpuri K, Schaeffer EK, Graham HK, Kocher MS, Sanders J, Zaltz I. Evidence-based Recommendations for Pediatric Orthopaedic Practice. J Pediatr Orthop. 2017 Apr 20.

Cvetanovich GL, Lizzio V, Meta F, Chan D, Zaltz I, Nho SJ, Makhni EC. Variability and Comprehensiveness of North American Online Available Physical Therapy Protocols Following Hip Arthroscopy for Femoroacetabular Impingement and Labral Repair. Arthroscopy. 2017 Sep 29.

Shore BJ, Miller PE, Zaltz I, Schoenecker PL, Sankar WN. Determining Hinge Abduction in Legg-Calvé-Perthes Disease: Can We Reliably Make the Diagnosis? J Pediatr Orthop. 2017 Dec 6 [Epub ahead of print].

Jacobs CA, Peabody MR, Duncan ST, Muchow RD, Nunley RM; ANCHOR Group, Clohisy JC, Beaule PE, Kim YJ, Millis MB, Podeszwa DA, Schoenecker PL, Sierra RJ, Sink EL, Sucato DJ, Trousdale RT, Zaltz I. Development of the HOOSglobal to Assess Patient-Reported Outcomes in Patients Undergoing Hip Preservation Procedures. Am J Sports Med. 2018 Jan [Epub ahead of print].

[Sankar WN](https://www.ncbi.nlm.nih.gov/pubmed/?term=Sankar%20WN%5BAuthor%5D&cauthor=true&cauthor_uid=29877918)1, [Novais E](https://www.ncbi.nlm.nih.gov/pubmed/?term=Novais%20E%5BAuthor%5D&cauthor=true&cauthor_uid=29877918), [Koueiter D](https://www.ncbi.nlm.nih.gov/pubmed/?term=Koueiter%20D%5BAuthor%5D&cauthor=true&cauthor_uid=29877918), [Refakis C](https://www.ncbi.nlm.nih.gov/pubmed/?term=Refakis%20C%5BAuthor%5D&cauthor=true&cauthor_uid=29877918), [Sink E](https://www.ncbi.nlm.nih.gov/pubmed/?term=Sink%20E%5BAuthor%5D&cauthor=true&cauthor_uid=29877918), [Millis MB](https://www.ncbi.nlm.nih.gov/pubmed/?term=Millis%20MB%5BAuthor%5D&cauthor=true&cauthor_uid=29877918), [Kim YJ](https://www.ncbi.nlm.nih.gov/pubmed/?term=Kim%20YJ%5BAuthor%5D&cauthor=true&cauthor_uid=29877918), [Clohisy J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Clohisy%20J%5BAuthor%5D&cauthor=true&cauthor_uid=29877918), [Wells J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wells%20J%5BAuthor%5D&cauthor=true&cauthor_uid=29877918), [Nepple J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Nepple%20J%5BAuthor%5D&cauthor=true&cauthor_uid=29877918), [Zaltz I](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zaltz%20I%5BAuthor%5D&cauthor=true&cauthor_uid=29877918).Analysis of Femoral Version in Patients Undergoing Periacetabular Osteotomy for Symptomatic Acetabular Dysplasia**.** [J Am Acad Orthop Surg.](https://www.ncbi.nlm.nih.gov/pubmed/29877918) 2018 Jun 5. doi: 10.5435/JAAOS-D-17-00076. [Epub ahead of print]

[Grammatopoulos G](https://www.ncbi.nlm.nih.gov/pubmed/?term=Grammatopoulos%20G%5BAuthor%5D&cauthor=true&cauthor_uid=29724578)1, [Beaulé PE](https://www.ncbi.nlm.nih.gov/pubmed/?term=Beaul%C3%A9%20PE%5BAuthor%5D&cauthor=true&cauthor_uid=29724578)2, [Pascual-Garrido C](https://www.ncbi.nlm.nih.gov/pubmed/?term=Pascual-Garrido%20C%5BAuthor%5D&cauthor=true&cauthor_uid=29724578)3, [Nepple JJ](https://www.ncbi.nlm.nih.gov/pubmed/?term=Nepple%20JJ%5BAuthor%5D&cauthor=true&cauthor_uid=29724578)3; [ANCHOR Group](https://www.ncbi.nlm.nih.gov/pubmed/?term=ANCHOR%20Group%5BCorporate%20Author%5D), [Clohisy JC](https://www.ncbi.nlm.nih.gov/pubmed/?term=Clohisy%20JC%5BAuthor%5D&cauthor=true&cauthor_uid=29724578)3. Collaborators: [Kim YJ](https://www.ncbi.nlm.nih.gov/pubmed/?term=Kim%20YJ), [Millis MB](https://www.ncbi.nlm.nih.gov/pubmed/?term=Millis%20MB), [Podeszwa DA](https://www.ncbi.nlm.nih.gov/pubmed/?term=Podeszwa%20DA), [Schoenecker PL](https://www.ncbi.nlm.nih.gov/pubmed/?term=Schoenecker%20PL), [Sierra RJ](https://www.ncbi.nlm.nih.gov/pubmed/?term=Sierra%20RJ), [Sink EL](https://www.ncbi.nlm.nih.gov/pubmed/?term=Sink%20EL), [Sucato DJ](https://www.ncbi.nlm.nih.gov/pubmed/?term=Sucato%20DJ), [Trousdale RT](https://www.ncbi.nlm.nih.gov/pubmed/?term=Trousdale%20RT), [Zaltz I](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zaltz%20I). Does Severity of Acetabular Dysplasia Influence Clinical Outcomes After Periacetabular Osteotomy?-A Case-Control Study. [J Arthroplasty.](https://www.ncbi.nlm.nih.gov/pubmed/29724578) 2018 Jul;33(7S):S66-S70. Epub 2018 Mar 17.

Sankar WN, Novais E, Koueiter D, Refakis C, Sink E, Millis MB, Kim YJ, Clohisy J, Wells J, Nepple J, Zaltz I. Analysis of Femoral Version in Patients Undergoing Periacetabular Osteotomy for Symptomatic Acetabular Dysplasia. J Am Acad Orthop Surg. 2018 Aug 1;26(15):545-551.

Mulpuri K, Schaeffer EK, Sanders J, **Zaltz I**, Kocher MS. Evidence-based Recommendations for Pediatric Orthopaedic PracticeJ Pediatr Orthop. 2018 Oct;38(9):551-555.

Daley E, Nahm N, Koueiter D, **Zaltz I**. Does Compensatory Anterior Pelvic Tilt Decrease After Bilateral Periacetabular Osteotomy?Clin Orthop Relat Res. 2019 May;477(5):1168-1175.

Daley E, Zaltz I. Strategies to Avoid Osteonecrosis in Unstable Slipped Capital Femoral Epiphysis: A Critical Analysis Review, JBJS Rev. 2019 Apr;7(4)

Edelstein AI, Kaiser Tegel K, Shaunfield S; ANCHOR Group , Clohisy JC, Stover MD.

ANCHOR surgeon views of patient selection and expectations for periacetabular osteotomy. J Hip Preserv Surg. 2019 Apr 21;6(2):109-116

Schmitz MR, Murtha AS, Clohisy JC; ANCHOR Study Group. [Developmental Dysplasia of the Hip in Adolescents and Young Adults.](https://www.ncbi.nlm.nih.gov/pubmed/31977605) J Am Acad Orthop Surg. 2020 Feb 1;28(3):91-101

**Book Chapters**

Zaltz I, Micheli LJ, “Peroneal Tendon Subluxation,” Current Therapy in Sports Medicine, C.V. Mosby, 1995.

Zaltz I and Kim YJ, Adolescent and Young Adult Hip, Orthopaedic Knowledge Update: Pediatrics 4, AAOS, 2010.

Castaneda P and Zaltz I, Hip, Pelvis, and Femur Disorders: Pediatrics, Orthopaedic Knowledge Update 10, AAOS , 2010.

Zaltz I, “Single Incision Triple Innominate Osteotomy” Pediatric Orthopaedic Surgery: Operative Techniques. Kocher M, Millis M (ed). Elsevier, 2011.

Zaltz I, Winters J, Boone C: Spondylolysis and Spondylolisthesis in the Skeletally Immature Patient. American Academy of Orthopaedic Surgeons Web site: Orthopaedic Knowledge Online 2011;9(8): Accessed August 25, 2011.

Scher C, Zaltz I, Abnormal Articular Anatomy of the Hip. Hip Magnetic Resonance Imaging, Springer, Nov 2012.

Zaltz I, Larkin B, “Osteoarthritis” in Surgery of the Hip (ed. Berry and Lieberman), Elsevier, 2013.

Kelly B, Maak T, Larson C, Bedi A, Zaltz I, Sports Hip Injuries: Assessment and Management, Instructional Course Lectures 62, AAOS, 2013.

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Zaltz I, Mahan M, Triple Innominate Osteotomy, Osteotomy of the Hip, Springer, 2017

Zaltz I, Kadado A, “Osteoarthritis” in Surgery of the Hip (ed. Berry and Lieberman), Elsevier, 2018.

JG Schoenecker, I Zaltz, J Roth, and P Schoenecker, “Acetabular Dysplasia in the Reduced or Subluxated Hip” in The Pediatric and Adolescent Hip, Essential and Evidence, Springer 2019

E Daley and I Zaltz, “Femoroacetabular Impingement” in The Pediatric and Adolescent Hip, Essential and Evidence, Springer 2019

I Zaltz and E Sink, “The Adolescent Hip” in Lovell and Winter, Pediatric Orthopaedics, LWW, 2019

E Daley and I Zaltz, “Proximal Femoral Osteotomy” in Paul Beaule, Hip Dysplasia-Understanding and Treating Instability in the Native Hip, Springer, 2020.

**Presentations**

**Podium (Peer-Reviewed)**

Snyder BD, **Zaltz I**, Emans JB, Hall JE. Predicting the Integrity of Vertebral Bone Screw

Fixation in Anterior Spinal Instrumentation. Scoliosis Research Society, 1994.

Snyder BD, **Zaltz I**, Breitenbach MC, Kido TH, Myers ER, Emans JB. Does Bracing

Affect Bone Density in Adolescent Scoliosis? Scoliosis Research Society, 1994.

**Zaltz I**, Waters PW, Hey L, Simmons BP. Cubital Tunnel Syndrome and Ulnar Nerve

Instability. American Society for Surgery of the Hand, 1994.

**Zaltz I**, Gibson G, Wang M. Molecular Mechanisms of Staple Epiphyseodesis, Pediatric Orthopaedic Society of North America Annual Meeting, Salt Lake City, UT, May, 2002.

**Zaltz I**, Millis MB. Debate: 16 year old female with asymptomatic acetabular dysplasia, American Academy of Orthopaedic Surgery Annual Meeting, San Francisco, CA, February 2004.

**Zaltz I**. Normal Physeal Anatomy and Growth, POSNA Specialty Day, AAOS Annual Meeting, Washington, DC, February, 2005.

**Zaltz I**, Lareau J. The Effects of Head-Neck Osteoplasty, Imhauser Osteotomy, and Combined Procedure on Hip Range of Motion in SCFE, POSNA, Hollywood, Fl, May, 2007.

**Zaltz I**. The Pathophanatomy of Femoroacetabular Impingement, POSNA Hip Breakout Session, Hollywood, FL, May, 2007.

**Zaltz I**. Cellular and Molecular Events During Staple Epiphyseodesis Recovery, POSNA Annual Meeting, Albuquerque, NM, May, 2008.

**Zaltz I**. The treatment of DDH in 8-18 Year Old Patients, POSNA Hip Breakout Session, Albuquerque, NM, May 2008.

Sink EL, Sucato DJ, Kim YJ, Dayton MR, Clohisy JC, **Zaltz, I**. Multi-center Evaluation of Early Complications Following Surgical Hip Dislocation. American Academy of Orthopaedic Surgeons Annual Meeting, Las Vegas, NV, February 25-28, 2009*.*

Rajan S, **Zaltz I**, Schutz A, Clohisy J. Unstable SCFE: A Systematic Review of Treatment and Results, MAOA, Amelia Island, Florida, April 24, 2009.

Sink EL, Sucato DJ, Kim YJ, Dayton MR, Clohisy JC, **Zaltz, I**. Multi-center Evaluation of Early Complications Following Surgical Hip Dislocation. Pediatric Orthopedic Society of North America Annual Meeting, Boston, MA, April 30-May 2, 2009.

Clohisy JC, **Zaltz I**, Sucato DJ, Podeszwa DA, Trousdale RT, Sierra RJ, Beaule PE, Sink EL, Dayton MR, Schoenecker PL. Early Complications Associated with the Periacetabular Osteotomy:  A Prospective Multicenter Study. American Academy of Orthopaedic Surgeons Annual Meeting, New Orleans, LA, March 9-13, 2010.

Clohisy JC, St. John LC, **Zaltz I**, Sucato DJ, Podeszwa DA, Trousdale RT, Sierra RJ, Beaule PE, Sink EL, Dayton MR, Schoenecker PL. Early Complications Associated with the Periacetabular Osteotomy:  A Prospective Multicenter Study*.* Mid-America Orthopaedic Association Annual Meeting, Lost Pines (Austin), Texas, April 21-25, 2010*.*

Nepple J, Martell JM, Hosalkar HS, Kim Y-J, Millis MB, Podeszwa DA, Sink EL, Sucato DJ, **Zaltz I**, Clohisy J. Comparison of Radiographs and CT Imaging in Detecting Femoral Head-Neck Junction Malformations. American Academy of Orthopaedic Surgery Annual Meeting, San Diego CA, February 16-19, 2011.

**Zaltz I**, Bedi A, Dela Torre K, Kelly BT. Comparison of Open Surgical Dislocation and Arthroscopic Osteoplasty for CAM-Type Impingement. American Academy of Orthopaedic Surgery Annual Meeting, San Diego CA, February 16-19, 2011.

Erez O, Bey M, **Zaltz I**. Markerless Tracking of Hip Motion and Femoroacetabular Impingement, Mid-America Orthopaedic Association Annual Meeting, Tucson AZ, April 8, 2011.

Nepple J, **Zaltz I**, Kim YJ, Millis MB, Sucato DJ, Podeszwa DA, Martell JM, Clohisy JC. The Prevalence of Pincer-Type Morphologies in Symptomatic Femoroacetabular Impingement, MAOA, April 2012.

Sierra RJ, Trousdale RT, Kim YJ, Millis MB, Beaule PE, **Zaltz I**, Sink EL, Podeszwa DA, Sucato DJ, Schoenecker PL. Return to Sports after Periacetabular Osteotomy, MAOA, April 2012.

Clohisy JC, Baca G, Schoenecker PL, Beaule PE, Larson C, Sucato DJ, Podeszwa DA, Sierra RJ, Trousdale RT, Millis MB, Kim YJ, Sink EL, **Zaltz I**. Revision Hip Preservation Surgery: Indication and Surgical Technique Profile, MAOA, April 2012.

Nepple JJ, Larson CM, Smith MV, Kim YJ, **Zaltz I**, Sierra RJ, Clohisy JC. The Reliability of Hip Arthroscopy Labral and Chondral Disease Classification, MAOA, April 2012.

Vogt, P.J., Leunig, M., **Zaltz, I**. and Ferguson, S.J., “Morphological determinants of hip instability”, Proceedings of the 5th International Conference on Computational Bioengineering, Leuven, Belgium, 2013.

Vogt, P.J., Leunig, M., **Zaltz, I.** and Ferguson, S.J., “Morphological determinants of hip instability”, Proceedings of the 19th Congress of the European Society of Biomechanics, Patras, Greece, 2013.

Nepple J, **Zaltz I**, Kim YJ, Millis MB, Sucato DJ, Podeszwa DA, Martell JM, Clohisy JC.

The Prevalence of Pincer-type Morphologies in Symptomatic Femoroacetabular Impingement. AAOS Annual Meeting, New Orleans, LA, March 11-15, 2014.

Sucato DJ, Podeszwa DA, De La Rocha A, Clohisy JC, Sink EL, **Zaltz I**, Millis MB, Kim YJ. A Concomitant Arthrotomy Does Not Improve Outcome for Adolescents with Hip Dysplasia Undergoing a PAO. AAOS Annual Meeting, New Orleans, LA, March 11-15, 2014.

Fishman MP, Baker K, **Zaltz I**. Transfusion Rate After Periacetabular Osteotomy in the Absence of Mandatory Autologous Blood Donation. Mid-America Orthopaedic Association Annual Meeting, San Antonio, TX, April 23-27, 2014.

Matheney T, Kim YJ, **Zaltz I**, Clohisy JC, Zurakowski D, Millis MB. Severity of Dysplasia and Patient Activity Predict Age of Presentation for Periacetabular Osteotomy for Symptomatic Hip Dysplasia. Pediatric Orthopedic Society of North America Annual Meeting, Hollywood, CA, April 30-May 3, 2014.

Clohisy JC, **Zaltz I**, Baca G, Podeszwa DA, Schoenecker PL, Sucato DJ, Trousdale RT, Larson CM, Ross J. Do Surgeons and Third Party Payors Agree on the Criteria to Diagnose Femoroacetabular Impingement? Pediatric Orthopedic Society of North America Annual Meeting, Hollywood, CA, April 30-May 3, 2014.

Baca G, Clohisy JC, **Zaltz I**, Schoenecker PL, Sucato DJ, Kim YJ, Beaule PE, Millis MB, Peters CL. Does Pain Chronicity in Patients with Symptomatic Acetabular Dysplasia Correlate with Intra-Articular Disease? Pediatric Orthopedic Society of North America Annual Meeting, Hollywood, CA, April 30-May 3, 2014*.*

Clohisy JC, Baca G, Duncan ST, **Zaltz I**, Millis MB, Sink EL, Trousdale RT, Kim YJ, Podeszwa DA, Schoenecker PL. Descriptive Epidemiology of Symptomatic Acetabular Dysplasia in Adolescents: A North American Cohort. Pediatric Orthopedic Society of North America Annual Meeting, Hollywood, CA, April 30-May 3, 2014.

Baca G, Clohisy JC, **Zaltz I**, Schoenecker PL, Sucato DJ, Kim YJ, Beaule PE, Millis MB, Peters CL. Does Pain Chronicity in Patients with Symptomatic Acetabular Dysplasia Correlate with Intra-Articular Disease? Podium presentation. Pediatric Orthopedic Society of North America Annual Meeting, Hollywood, CA, April 30-May 3, 2014.

Clohisy JC, Baca G, Duncan ST, **Zaltz I**, Millis MB, Sink EL, Trousdale RT, Kim YJ, Podeszwa DA, Schoenecker PL. Descriptive Epidemiology of Symptomatic Acetabular Dysplasia in Adolescents: A North American Cohort. Podium presentation. Pediatric Orthopedic Society of North America Annual Meeting, Hollywood, CA, April 30-May 3, 2014.

**Zaltz I**. Podium presentation. Pediatric Orthopedic Society of North America Annual Meeting, Atlanta, GA, April 29-May 2, 2015.

Beaule P, Beck M, Bedi A, Byrd JW, Clohisy JC, Larson C, Leunig M, Siebenrock K, Sink E, **Zaltz I**. Femoroacetabular Impingement: Current TICKET Understanding of Pathomechanics, Disease Staging, Relationship to Osteoarthritis, and Contemporary Treatment. American Academy of Orthopaedic Surgeons Annual Meeting, Orlando, FL, March 1-5, 2016.

**Zaltz I** (moderator), Bedi A, Castaneda P, Christoforetti J, Cook C, Ganz R, Giordano B, Millis M, Novais E, Sankar W, Siebenrock K, Sink E, Tannast M. Adolescent Hip Pain: A Frequent Complaint. American Academy of Orthopaedic Surgeons Annual Meeting, Orlando, FL, March 1-5, 2016.

**Ira Zaltz**, MD; Eduardo Novais, MD; Michael Millis, MD; Young Jo Kim, MD; Wudbhav Sankar, MD. Abnormal Growth of the Upper Femur following the Modified-Dunn Procedure. European Paediatric Orthopaedic Society & Pediatric Orthopaedic Society of North America Combined Annual Meeting, Barcelona, Spain, May 3-6, 2017.

**Ira Zaltz**, MD; Erika Daley, MD; Nickolas Nahm, MD; Denise Koueiter. Do Compensatory Anterior Pelvic Tilt and Lumbar Lordosis Decrease Following

Bilateral Periacetabular Osteotomy? European Paediatric Orthopaedic Society & Pediatric Orthopaedic Society of North America Combined Annual Meeting, Barcelona, Spain, May 3-6, 2017.

Ernest Sink, MD; John Clohisy, MD; Geneva Baca; Paul Beaule, MD; Young Jo Kim, MD; Michael Millis, MD; David Podeszwa, MD; Perry Schoenecker, MD; Rafael Sierra, MD; Daniel J. Sucato, MD, MS; Robert Trousdale, MD; **Ira Zaltz**, MD. Clinical Outcomes of Periacetabular Acetabular Osteotomy Outcomes at Mid-term?

A Prospective Multi-center Cohort Study. European Paediatric Orthopaedic Society & Pediatric Orthopaedic Society of North America Combined Annual Meeting, Barcelona, Spain, May 3-6, 2017.

David Podeszwa, MD; Jeffrey Petrie, MD; Tonya An, MD; Perry Schoenecker, MD; **Ira Zaltz**, MD; Young Jo Kim, MD; Michael Millis, MD; Rafael Sierra, MD; Robert Trousdale, MD; Daniel J. Sucato, MD, MS; Ernest Sink, MD; Paul Beaule, MD; John Clohisy, MD; ANCHOR Group. What is the Impact of PAO Surgery on Patient Function and Activity Levels? European Paediatric Orthopaedic Society & Pediatric Orthopaedic Society of North America Combined Annual Meeting, Barcelona, Spain, May 3-6, 2017.

Wudbhav Sankar, MD; Perry Schoenecker, MD; **Ira Zaltz**, MD; Patricia Miller, MS; Benjamin Shore, MD. Determining Hinge Abduction in LCPD: Can We Confidently Make the Diagnosis? European Paediatric Orthopaedic Society & Pediatric Orthopaedic Society of North America Combined Annual Meeting, Barcelona, Spain, May 3-6, 2017.

Erika Daley MD, Nickolas Nahm MD, Denise Koueiter, **Ira Zaltz** MD. Do Compensatory Anterior Pelvic Tilt and Lumbar Lordosis Decrease Following Bilateral Periacetabular Osteotomy? American Academy of Orthopaedic Surgeons Annual Meeting, New Orleans, LA, March 6-10, 2018.

Pablo Castaneda MD (moderator), Nicholas Clarke, FRCS, Martin Gargan, FRCS, Simon Kelley, MBChB, FRCS, Kishore Mulpuri, MBBS, MS, Charles T. Price, MD, Wudbhav N. Sankar, MD, Vidyadhar V. Upasani, MD, Carlos A. Vidal, MD, Stuart L. Weinstein, MD, **Ira Zaltz** MD. Controversies in the Treatment of Infantile Hip Dysplasia: A Worldwide Perspective. American Academy of Orthopaedic Surgeons Annual Meeting, New Orleans, LA, March 6-10, 2018.

John Clohisy MD (moderator), Asheesh Bedi, MD, Young Jo Kim, MD, PhD, Christopher M. Larson, MD, Jeffrey J. Nepple, MD, Christopher L. Peters, MD, James Ross, MD, Klaus Siebenrock, MD, Ernest L. Sink, MD, Moritz Tannast, MD, **Ira Zaltz** MD. Adolescent Hip Pain: A Case-Based Approach to Common Causes. American Academy of Orthopaedic Surgeons Annual Meeting, New Orleans, LA, March 6-10, 2018.

**Poster**

**Zaltz I**, Gibson G, Les C, Wang M, Spence C. Molecular Mechanisms of Staple Epiphyseodesis, Orthopaedic Research Society Annual Meeting, February, 2001.

**Zaltz I**, Gibson G, Les C Wang M. Molecular Changes in Response to Staple Epiphyseodesis, Pediatric Orthopaedic Society of North America, Annual Meeting, St. Louis, MO, 2004.

**Zaltz I**, Horowitz K, von Holsbeek M. The Use of Dynamic Ultrasound in the Diagnosis of Femoroacetabular Impingement, POSNA Annual Meeting, Albuquerque, NM, May, 2008.

Kempton L, Nantau W, **Zaltz I**. Successful Monitoring of Motor Evoked Potentials with Isoflurane and Nitrous Oxide in Spine Surgeries, POSNA Annual Meeting, Albuquerque, NM, May 2008.

Rajan S, **Zaltz I**, Schutz A, Clohisy JC. Unstable SCFE:  A Systematic Review of Treatments and Results.  Pediatric Orthopedic Society of North America Annual Meeting, Boston, MA, April 30-May 2, 2009.

Nepple J, Martell JM, Kim YJ, Millis MB, Podeszwa DA, Sink EL, Sucato DJ, **Zaltz I**, Clohisy J. Do alpha angles on Plain Radiographs Correlate with Three-Dimensional Imaging? American Academy of Orthopaedic Surgery Annual Meeting, San Diego CA, February 16-19, 2011.

Nepple J, Martell JM, Hosalkar HS, Kim YJ, Millis MB, Podeszwa DA, Sink EL, Sucato DJ, **Zaltz I**, Clohisy J. Are Standard Measures of Pelvic Tilt and Rotation Reliable? American Academy of Orthopaedic Surgery Annual Meeting, San Diego CA, February 16-19, 2011.

Podeszwa D, Sucato D, DeLaRocha A, Clohisy J, Sink E, **Zaltz I**, Kim Y, Wenger D, Hosalkar H, Millis M. Diagnostic and Treatment Selection Agreement in Symptomatic Femoroacetabular Impingement in Residual Perthes Disease. POSNA Annual Meeting, Montreal, Quebec, Ca, May 2011.

Clohisy JC, Baca G, Beaulé PE, Kim YJ, Larson CM, Millis MB, Podeszwa DA, Schoenecker PL, Sierra RJ, Sink EL, Sucato DJ, Trousdale RT, **Zaltz I**; ANCHOR Study Group. Descriptive Epidemiology of Symptomatic Acetabular Dysplasia: A North American Cohort. AAOS Annual Meeting, New Orleans, LA, March 11-15, 2014.

Ross JR, Beaule PE, Baca G, **Zaltz I**, Podeszwa D, Sucato D, Schoenecker P, Millis M, Kim YJ, Trousdale R, Sierra R, Sink E, Clohisy J; ANCHOR Study Group. Do Surgeons and Third Party Payors Agree on the Criteria to Diagnose Femoroacetabular Impingement? AAOS Annual Meeting, New Orleans, LA, March 11-15, 2014.

Baca G, Beaule PE, Clohisy JC, Kim YJ, Millis MB, Podeszwa DA, Schoenecker PL, Sierra RJ, Sink EL, Sucato DJ, Trousdale RT, and **Zaltz I**. Clinical Outcomes of Periacetabular Acetabular Osteotomy Outcomes at Mid-term? A Prospective Multi-center Cohort Study. Poster No. PO12. American Academy of Orthopaedic Surgeons Annual Meeting, San Diego CA, March 15-17, 2017.

**Ira Zaltz**, MD; Eduardo Novais, MD; Jeffrey Nepple, MD; John Clohisy, MD; Ernest Sink, MD; Wudbhav Sankar, MD. An Analysis of Femoral Version in Patients Undergoing Periacetabular Osteotomy. European Paediatric Orthopaedic Society & Pediatric Orthopaedic Society of North America Combined Annual Meeting, Barcelona, Spain, May 3-6, 2017.

**Invited**

Zaltz I, Review of Acetabular Fractures, New England Fracture Forum Boston, MA, 1994.

 Zaltz, I, Herring A, Legg-Perthes Disease and Greater Trochanteric Apophyseal

Growth, Brandon Carrell Visiting Professor, 1997.

Zaltz, I, Update: Adolescent Idiopathic Scoliosis, Hope Children’s Hospital Pediatrics Update, Oak Lawn, IL, September, 1997.

Zaltz, I, Pediatric Orthopaedic Emergencies, 3rd Annual Pediatric Update, Acute Care Symposium, Chicago, IL, October, 1998.

Zaltz, I, Update: Idiopathic Scoliosis and Spinal Surgery, Update: Pediatric Physiologic Gait Abnormalities, Hope Children’s Hospital Pediatrics Update, Oak Lawn, IL, March, 1999.

Zaltz, I, Grand Rounds, Legg-Calve-Perthes Disease, Shriners Hospital for Crippled Children, Chicago Unit, January 31, 2000.

Zaltz, I, Unstable Femur Fractures: Treatment with Titanium Flexible Nails, Branden Carrell Visiting Professor, University of Texas-Southwestern Medical Center, Dallas, Texas, April 15, 2000.

Zaltz, I, Adolescent Idiopathic Scoliosis, Grand Rounds, St. Joseph Mercy Medical Center, Pontiac, MI, October 25, 2000.

Zaltz I, Gibson G, Wang M, Molecular Mechanism of Staple Epiphyseodesis, University of Texas Southwestern Medical Center, June 8, 2001.

Zaltz I, Developmental Dysplasia of the Hip: Childhood to Adulthood, Michigan Orthopaedic Society Summer Meeting, June, 2002.

Zaltz I, Childhood Aspects of Developmental Dysplasia of the Hip, Department of Pediatrics, St. Johns’ Hospital and Medical Center, Detroit, MI, October, 2002.

Zaltz I, Scoliosis, An Overview, Henry Ford Comprehensive Spinal Symposium, Southfield MI, December 6, 2002.

Zaltz I, Coxa Valga and Acetabular Dysplasia, Grice Day Symposium, Children’s Hospital, Boston, MA, November, 2004.

Zaltz I, Treatment of Pediatric Forearm and Wrist Fractures, COGMET, Michigan State University, Troy MI, December 2004.

Zaltz I, Femoral Acetabular Impingement, Michigan Orthopaedic Society, Kalamazoo, Michigan, November, 2005.

Zaltz I, Femoral Acetabular Impingement, Genesys Regional Health System, Grand Rounds, Department of Orthopaedics, February, 2006.

Zaltz I, Hip Deformity in the Adult Patient, Garden City Hospital, Department of Orthopaedics, Garden City, MI, March, 2007.

Zaltz I, Femoroacetabular Impingement and Acetabular Dysplasia, Department of Orthopaedic Surgery, McLaren Regional Hospital, Department of Orthopaedic Surgery, Flint, MI, June, 2007.

Zaltz I, Pediatric Elbow Injuries, COGMET-Michigan State University, November, 2007.

Zaltz I, The radiologic diagnosis of adult hip disorders, Henry Ford Hospital, Department of Orthopaedic Surgery, Detroit, MI, February 13, 2008.

Zaltz I, Adolescent and Young Adult Sports-Related Hip Disorders, COGMET-Michigan State University, April, 2010.

Zaltz I, Current Indications and Results of In-Situ Pinning, 8th Symposium on Joint Preserving and Minimally Invasive Surgery of the Hip, June 8-10, 2010, University of Ottawa, Ottawa, Canada.

Zaltz I, Legg Calve Perthes: Defining the Deformity and Impact of Childhood Surgery, 8th Symposium on Joint Preserving and Minimally Invasive Surgery of the Hip, June 8-10, 2010, University of Ottawa, Ottawa, Canada.

Zaltz I, Hip Arthroscopy: Indications and Techniques, DMC 3rd Annual Symposium on Sports Medicine, Dearborn, Michigan, July 31-31, 2010.

Zaltz I, High Grade Dysplasia-Technical Tips, 9th Annual International Hip Symposium, New York, NY, June 11, 2011.

Zaltz I, The Upper Femur in FAI and Dysplasia, 9th Annual International Hip Symposium, New York, NY, June 11, 2011.

Zaltz I, The Spectrum of Hip Instability, DMC 4th Annual Symposium on Sports Medicine, Detroit, Michigan, July 30, 2011.

Zaltz I, FAI: Extraarticular FAI and dynamic imaging, AO Hip Symposium, Jackson Hole WY, January 22-25, 2013.

Zaltz I, DDH Complications of PAO: Anchor Group, AO Hip Symposium, Jackson Hole WY, January 22-25, 2013.

Zaltz I, FAI: What are the Limits of Arthroscopy? When is surgical dislocation best. AO Hip Symposium, Jackson Hole WY, January 22-25, 2013.

Zaltz I, Advanced Topics in SCFE: From Modified Dunn to Arthroscopy. AO Hip Symposium, Jackson Hole WY, January 22-25, 2013.

Zaltz I, The Labrum: Structure, Function and Pathomechanics, 10th Anniversary Symposium on Joint Preserving and MIS of the Hip, Quebec City, QC, Canada, May 30-June1, 2013.

Zaltz I Coxa Saltans, 10th Anniversary Symposium on Joint Preserving and MIS of the Hip, Quebec City, QC, Canada, May 30-June1, 2013.

Zaltz I, CT Evaluation of Femoral Version, International Hip Symposium, Bern, Switzerland, February 5-7, 2014.

Zaltz I, Ultrasound evaluation of male hip range of motion. International Hip Symposium, Bern, Switzerland, February 5-7, 2014.

Zaltz I, 11th Symposium on Joint Preserving and Minimally Invasive Surgery of the Hip, Ottawa, ON, Canada, June 4-6, 2015.

Zaltz I, AAOS Annual Meeting, Las Vegas, NV, March 24-28, 2015.

Zaltz I, 7th International Hip Arthroscopy Meeting, Cambridge, UK, September 23-26, 2015.

Zaltz I, Annual ANCHOR Meeting, Detroit, MI, November 19-20, 2015.

Zaltz I, St. Louis Hip Skills Course: Hip Arthroscopy and Preservation Procedures, St. Louis, MO, January 22-23, 2016.

Zaltz I, Berne Hip Symposium, Berne, Switzerland, February 4-6, 2016.

Zaltz I, POSNA Annual Meeting, Indianapolis, IN, April 27-30, 2016.

Zaltz I (moderator), Bedi A, Castaneda P, Christoforetti JJ, Cook PC, Giordano BD, Millis MB, Novais EN, Sankar WN, Siebenrock K, Sink EL, Tannast M. Adolescent Hip Pain: A Frequent Complaint. AAOS Annual Meeting, San Diego, CA, March 15, 2017.

Zaltz I (moderator), Clohisy JC, Kim YJ, Leunig M, Loder RT, Millis MB, Peters CL, Sankar WN, Schoenecker PL, Sink EL, Weinstein SL, Zilkens C. Slipped Capital Femoral Epiphysis in 2017: Scientific Advancements and Evolving Treatment Modalities. AAOS Annual Meeting, San Diego, CA, March 16, 2017.

Zaltz I and Kelly BT, Course Directors, AAOS/POSNA/ISHA, Surgical Treatment of the Prearthritic Hip, AAOS Learning Center, September 13-14, 2019, Chicago, Illinois.

Zaltz I, Saint Louis Hip Skills Course, January 30-31, 2020, St. Louis University, Saint Louis, MO

**Visiting Professorships/Lectureships**

Zaltz I, SCFE: Where we were, where we are, where we are going. Grand Rounds, Department of Orthopaedic Surgery, University of Wisconsin, April 6, 2011.

Zaltz I, Developmental Dysplasia of the Hip, Wayne State University Department of Orthopaedic Surgery Grand Rounds, Wednesday, June 12, 2013.

Zaltz I, Visiting Professor, Milton S. Hershey School of Medicine, Department of Orthopaedic Surgery at Pennsylvania State University, November 7, 2013.

Zaltz I, Visiting Professor, Milton S. Hershey School of Medicine, Department of Orthopaedic Surgery at Pennsylvania State University, November 7, 2013.

Zaltz I, Universidad Nacional Autonoma de Mexico, ABC Medical Center, Mexico City, August 29, 2014.

Zaltz I, Visiting Professor, University of Michigan, January 2016.

Zaltz I, ““The History and Evolution of Hip Preserving Surgery,” Alvin Crawford Lecturer, Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, October 14, 2016.

Zaltz I, Ellen and Alfred Grant Lecturer, New York University Hospital for Joint Diseases, New York, NY, January 12, 2017.

Zaltz I, SAOTI Visiting Lecture, Buenos Aires, Argentina, September 2018

Zaltz I, University of British Columbia, Vancouver, British Columbia, October, 2018

Zaltz I, Carroll Larson Visiting Professor, University of Iowa, Iowa City, Iowa, June, 2019

**Teaching**

6/2011 Ninth Symposium on Joint Preserving and MIS of the Hip, University of Ottawa

6/2012 International Symposium on Joint Preservation and MIS of the Hip, Hospital for Special Surgery, New York, New York

7/2012 AAOS Hip Preservation in the Adolescent and Young Adult #3280

5/2013 Tenth Symposium on Joint Preserving and MIS of the Hip, University of Ottawa

12/2013 International Pediatric Orthopaedic Symposium, Orlando, Florida

2/2014 Berne Hip Symposium, Berne, Switzerland

2/2016 Berne Hip Symposium, Berne, Switzerland

2/2018 Berne Hip Symposium, Berne, Switzerland

**Research/Grants**

**Past Research**

2/2000-6/2009 Molecular Mechanisms of Epiphyseodesis and Recovery

 Bone and Joint Center, Henry Ford Health Science Center

 Research Institute, William Beaumont Hospital

**Research in Progress**

1/2001-present Prevalence of Morphologic Variations in Hip Radiography,

 Henry Ford Health Systems

2/2003-present Surgical Treatment of Impingement in SCFE, biomechanical modeling, Henry Ford Health System

2/2004-present Ultrasonography of Femoral Acetabular Impingement,

Henry Ford Health System

1/2011-present Dynamic Hip Imaging, In-vivo Analysis of Acetabular Reorientation,

William Beaumont Health System

**Grants**

9/2000 Herrick Foundation, Epiphyseal Chondrocyte Response to Stress

 Henry Ford Health Science Center, $50,000

5/2002 Pediatric Orthopaedic Society of North America OREF Grant

 Molecular Mechanisms of Staple Epiphyseodesis

 Annual Research Award, $30,000

**Sponsored Research**

1/2008 Johnsons & Johnson Depuy, Non-fusion scoliosis correction feasibility

**Service**

**Editorial Positions**

2006-2009 Reviewer, Journal of American Academy of Orthopaedic Surgery

2007-present Field Test Task Force, Part I Examination, American Board of Orthopaedic Surgery

2007-present Reviewer, Journal of Pediatric Orthopaedic Surgery

2010-present Reviewer, Journal of Bone and Joint Surgery

2011-present Reviewer, Clinical Orthopaedics and Related Research

2013 Guest Editor (with Millis M), Clinical Orthopaedics and Related Research, Volume 471.

2014-present Editorial Board, Journal of Hip Preservation Surgery

**Hospital Committees**

2000-present Pediatric Orthopaedics, Henry Ford Hospital

2003-present Orthopaedic Education Committee, William Beaumont Hospital

**Public**

1997-present Silver Service Children’s Foundation

2008-present Co-chair, Hip Preservation Study Group

2011-present POSNA, Clinical Trials Committee

2013-2014 Chair, POSNA Evidence Based Practice Committee

2014-present Board of Trustees, Congregation Shaarey Zedek, Southfield, MI

2018-2020 Pediatric Orthopaedic Society, Senior Member at Large