CURRICULUM VITAE

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Education:

Texas A&M University, College Station, Texas, 1981-1985
B.S. Chemistry, magna cum laude (1985)

UT Southwestern Medical Center, Dallas, Texas, 1985-1991
Ph.D. Biochemistry (1991)
Thesis: "Structural and Functional Studies of the Yeast Mitochondrial RNase P RNA", Nancy C. Martin, PhD, thesis supervisor

Baylor College of Medicine, Houston, Texas (1992)
Postdoctoral training, Human Molecular Genetics, James Lupski, MD, PhD, mentor

UT Southwestern Medical Center, Dallas, TX (1996)
Postdoctoral training, National Human Genome Research Institute fellow, 1994-1996
Michael Lovett, PhD, mentor

Appointments:

Texas Scottish Rite Hospital for Children
Research Scientist, 1996
Director, Molecular Genetics, TSRHC Seay Center for Musculoskeletal Research, 2000
Director of Basic Research, 2015
Member,Sarah M. and Charles E. Seay
Martha and Pat Beard Centers
for Excellence in Spine Research and Limb Lengthening and Reconstruction, 2004-

University of Texas Southwestern Medical Center
Assistant Professor, Orthopaedic Surgery, 1997
Associate Professor, 2008
Professor, 2014

Secondary appointment, McDermott Center for Human Growth and Development, 2005
Secondary appointment, Department of Pediatrics, 2013
Genes and Development training program, 2010-

Institutional: TSRHC Research Advisory Panel, 2000- (chair 2000-2001)

UTSW Medical Genetics Training Program, 2005-

UTSW Medical Student interviewer, 2009-

TSRHC Research Oversight Committee, 2013-

UTSW Graduate Admissions Committee, 2014-2017

UTSW Promotions and Tenure Committee, 2017-

Honors: Faculty Merit Award; High honors graduate (magna cum laude), Texas A&M University College of Science, 1985

Appreciation award in student mentoring, University of Texas Medical School at Houston, 2003

Lone Star Leader; WFAA and Sewell Cadillac; YWCA Centennial Award; The Dallas Morning News Texan of the Year nominee, 2007

John L. DeGrozier Lodge Community Builder Award; The Family Place Texas Trailblazer, 2008

Ft. Worth Scottish Rite Foundation Anson Jones Award; Dallas Business Journal health Care Hero; Forney High School Hall of Honor, 2009

Brooklyn Lodge Community Builder Award, 2010

Texas Genetics Society Distinguished Service Award, 2011

Scoliosis Research Society Russell A. Hibbs Basic Science Award, 2012, 2014

Memberships: American Society of Human Genetics

Scoliosis Research Society, Associate Fellow
Etiology Committee, 2004-2007
Research Committee (Chair, genetics), 2011-2015

Pediatric Orthopaedic Society of North America, Associate Member, 2005-

Texas Genetics Society, 2002-
Board of Directors, 2003-2006, 2011-2014
President, 2007-2008
Nominating committee, 2010

American Association for the Advancement of Science

Reviewing:

National Institutes of Health (NIH)

National Institute of General Medical Sciences, *ad hoc*, 2009

Skeletal Biology of Development and Disease (SBDD) study section, *ad hoc*, 2009, 2011, 2013

Special Emphasis Panel, *ad hoc*, 2009

Genomics, Computational Biology and Technology (GCAT), *ad hoc,* 2010

Genetics of Health and Disease (GHD), *ad hoc,* 2010
Special Emphasis Panel (Challenge grants), 2010

Special Emphasis Panel, Spinal Cord Biology and Bone Implants (SBDD), 2013

NIH NICHD Special Review Panel ZhD1 co-chair, 2016

Research Grants Council of Hong Kong, 2008

Medical Research Council Great Britain, 2009

Arthritis Research UK, 2011

Children's Medical Center DNA Repository review committee

Various molecular genetics and medical journals

Editing:

Molecular Genetics of Pediatric Orthopaedic Disorders, Springer, 233 Spring Street, New York, NY 10013, 2013

Consortia/

Working groups: NICHD Structural Birth Defects Working Group, 2008-present

Consortium for Juvenile Arthritis Genetics (CJAG), 2006-2012

Primordial Registry at A. I. duPont Hospital for Children, 2008-present

International Consortium for Spinal Genetics, Development, and Diseases (formerly International Consortium for Scoliosis Genetics (ISCG)) (founding member and chair), 2012- present

Conferences Organized

Texas Genetics Society
- Meeting organizer, 2005
- Meeting Host 2007, 2011

International Consortium for Scoliosis Genetics
- Inaugural Meeting Host, 2012
- Meeting organizer, 2013

Multidisciplinary conference, Children's Medical Center, CMC 2015

Genomic Approaches to Understanding and Treating Scoliosis
- Inaugural Meeting Host, 2017
- Meeting Organizer, 2017

Research interest: Molecular mechanisms of pediatric musculoskeletal disease

Bibliography - Peer-reviewed journal publications

1. Sheets JJ, Mason JI, **Wise CA**, Estabrook RW. Inhibition of rat liver microsomal cytochrome P-450 steroid hydroxylase reactions by imidazole antimycotic agents. *Biochem Pharmacol*. 1986;35(3):487-91. Epub 1986/02/01. PMID: 3947383
2. Morales MJ, **Wise CA**, Hollingsworth MJ, Martin NC. Characterization of yeast mitochondrial RNase P: an intact RNA subunit is not essential for activity in vitro. *Nucleic Acids Res.*1989;17(17):6865-81. Epub 1989/09/12. PMID: 2476723
3. Shu HH, **Wise CA**, Clark-Walker GD, Martin NC. A gene required for RNase P activity in Candida (Torulopsis) glabrata mitochondria codes for a 227-nucleotide RNA with homology to bacterial RNase P RNA. *Mol Cell Biol*. 1991;11(3):1662-7. Epub 1991/03/01. PMID: 1705011
4. **Wise CA**, Martin NC. Dramatic size variation of yeast mitochondrial RNAs suggests that RNase P RNAs can be quite small. *J Biol Chem*. 1991;266(29):19154-7. Epub 1991/10/15. PMID: 1918032
5. **Wise CA**, Martin NC. Sequence analysis of Saccharomyces exiguus mitochondrial DNA reveals an RNase P RNA gene flanked by two tRNA genes. *Nucleic Acids Res*. 1991;19(17):4773. Epub 1991/09/11. PMID: 1716360
6. Pentao L, **Wise CA**, Chinault AC, Patel PI, Lupski JR. Charcot-Marie-Tooth type 1A duplication appears to arise from recombination at repeat sequences flanking the 1.5 Mb monomer unit. *Nat Genet*. 1992;2(4):292-300. Epub 1992/12/01. PMID: 1303282
7. Roa BB, Garcia CA, Suter U, Kulpa DA, **Wise CA**, Mueller J, Welcher AA, Snipes GJ, Shooter EM, Patel PI, Lupski JR. Charcot-Marie-Tooth disease type 1A. Association with a spontaneous point mutation in the PMP22 gene. *N Engl J Med.* 1993;329(2):96-101. Epub 1993/07/08. PMID: 8510709
8. Roa BB, Garcia CA, **Wise CA**, Anderson K, Greenberg F, Patel PI, Lupski JR. Gene dosage as a mechanism for a common autosomal dominant peripheral neuropathy: Charcot-Marie-Tooth disease type 1A. *Prog Clin Biol Res*. 1993;384:187-205. Epub 1993/01/01. PMID: 8115402
9. **Wise CA**, Garcia CA, Davis SN, Heju Z, Pentao L, Patel PI, Lupski JR. Molecular analyses of unrelated Charcot-Marie-Tooth (CMT) disease patients suggest a high frequency of the CMTIA duplication. *Am J Hum Genet*. 1993;53(4):853-63. Epub 1993/10/01. PMID: 8105684
10. Li X, **Wise CA**, Le Paslier D, Hawkins AL, Griffin CA, Pittler SJ, Lovett M, Jabs EW. A YAC contig of approximately 3 Mb from human chromosome 5q31-->q33. *Genomics*. 1994;19(3):470-7. Epub 1994/02/01. PMID: 8188289
11. Lupski JR, **Wise CA**, Kuwano A, Pentao L, Parke JT, Glaze DG, Ledbetter DH, Greenberg F, Patel PI. Gene dosage is a mechanism for Charcot-Marie-Tooth disease type 1A. *Nat Genet*.1992;1(1):29-33. Epub 1992/04/01. PMID: 1301995

12. Sulo P, Groom KR, **Wise C**, Steffen M, Martin N. Successful transformation of yeast mitochondria with RPM1: an approach for in vivo studies of mitochondrial RNase P RNA structure, function and biosynthesis. *Nucleic Acids Res*. 1995;23(5):856-60. Epub 1995/03/11. PMID: 7708503
13. **Wise CA**, Chiang LC, Paznekas WA, Sharma M, Musy MM, Ashley JA, Lovett M, Jabs EW. TCOF1 gene encodes a putative nucleolar phosphoprotein that exhibits mutations in Treacher Collins Syndrome throughout its coding region. *Proc Natl Acad Sci USA*. 1997;94(7):3110-5. Epub 1997/04/01. PMID: 9096354
14. **Wise CA**, Clines GA, Massa H, Trask BJ, Lovett M. Identification and localization of the gene for EXTL, a third member of the multiple exostoses gene family. *Genome Res*. 1997;7(1):10-6. Epub 1997/01/01. PMID: 9037597
15. Nichols KE, Harkin DP, Levitz S, Krainer M, Kolquist KA, Genovese C, Bernard A, Ferguson M, Zuo L, Snyder E, Buckler AJ, **Wise C**, Ashley J, Lovett M, Valentine MB, Look AT, Gerald W, Housman DE, Haber DA. Inactivating mutations in an SH2 domain-encoding gene in X-linked lymphoproliferative syndrome. *Proc Natl Acad Sci USA*. 1998;95(23):13765-70. Epub 1998/11/13. PMID: 9811875
16. Dobson-Stone C, Cox RD, Lonie L, Southam L, Fraser M, **Wise C**, Bernier F, Hodgson S, Porter DE, Simpson AH, Monaco AP. Comparison of fluorescent single-strand conformation polymorphism analysis and denaturing high-performance liquid chromatography for detection of EXT1 and EXT2 mutations in hereditary multiple exostoses. *Eur J Hum Genet*. 2000;8(1):24-32. Epub 2000/03/14. PMID: 10713884
17. **Wise CA**, Barnes R, Gillum J, Herring JA, Bowcock AM, Lovett M. Localization of susceptibility to familial idiopathic scoliosis. *Spine* (Phila Pa 1976). 2000;25(18):2372-80. Epub 2000/09/14. PMID: 10984791
18. **Wise CA**, Bennett LB, Pascual V, Gillum JD, Bowcock AM. Localization of a gene for familial recurrent arthritis. *Arthritis Rheum*. 2000;43(9):2041-5. Epub 2000/10/03. PMID: 11014354
19. **Wise CA**. EXTraordinary Bones: Functional and Genetic Analysis of the EXT Gene Family. *Curr Genomics*. 2001;2(2):125-140.
20. Bonafe L, Blanton SH, Scott A, Broussard S, **Wise CA**, Superti-Furga A, Hecht JT. DTDST mutations are not a frequent cause of idiopathic talipes equinovarus (club foot). *J Med Genet*. 2002;39(4):e20. Epub 2002/04/16. PMID: 11950872
21. **Wise CA**, Gillum JD, Seidman CE, Lindor NM, Veile R, Bashiardes S, Lovett M. Mutations in CD2BP1 disrupt binding to PTP PEST and are responsible for PAPA syndrome, an autoinflammatory disorder. *Hum Mol Genet*. 2002;11(8):961-9. Epub 2002/04/25. PMID: 11971877
22. Shoham NG, Centola M, Mansfield E, Hull KM, Wood G, **Wise CA**, Kastner DL. Pyrin binds the PSTPIP1/CD2BP1 protein, defining familial Mediterranean fever and PAPA syndrome as disorders in the same pathway. *Proc Natl Acad Sci USA*. 2003;100(23):13501-6. Epub 2003/11/05. PMID: 14595024

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24. Bashiardes S, Veile R, **Wise CA**, Szappanos L, Lovett M. Positional cloning strategies for idiopathic scoliosis. *Stud Health Technol Inform*. 2002;91:86-9. Epub 2004/10/02. PMID: 15457700
25. Davies SJ, **Wise C**, Venkatesh B, Mirza G, Jefferson A, Volpi EV, Ragoussis J. Mapping of three translocation breakpoints associated with orofacial clefting within 6p24 and identification of new transcripts within the region. *Cytogenet Genome Res*. 2004;105(1):47-53. Epub 2004/06/26. PMID: 15218257
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27. Karol LA, Brown DS, **Wise CA**, Waldron M. Familial osteofibrous dysplasia. A case series. *J Bone Joint Surg Am*. 2005;87(10):2297-307. Epub 2005/10/06. PMID: 16203897
28. Lonie L, Porter DE, Fraser M, Cole T, **Wise C**, Yates L, Wakeling E, Blair E, Morava E, Monaco AP, Ragoussis J. Determination of the mutation spectrum of the EXT1/EXT2 genes in British Caucasian patients with multiple osteochondromas, and exclusion of six candidate genes in EXT negative cases. *Hum Mutat*. 2006;27(11):1160. Epub 2006/10/17. PMID: 17041877
29. **Wise CA**. EXTraordinary Bones: Functional and Genetic Analysis of the EXT Gene Family. *Curr Genomics*. 2006;7(2):138-148.
30. Zhang D, Herring JA, Swaney SS, McClendon TB, Gao X, Browne RH, Rathjen KE, Johnston CE, Harris S, Cain NM, **Wise CA**. Mutations responsible for Larsen syndrome cluster in the FLNB protein. *J Med Genet*. 2006;43(5):e24. Epub 2006/05/02. PMID: 16648377
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39. **Wise CA**, Gao X, Shoemaker S, Gordon D, Herring JA. Understanding genetic factors in idiopathic scoliosis, a complex disease of childhood. *Curr Genomics*. 2008;9(1):51-9. Epub 2008/03/01. PMID: 19424484
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47. Bicknell LS, Walker S, Klingseisen A, Stiff T, Leitch A, Kerzendorfer C, Martin CA, Yeyati P, Al Sanna N, Bober M, Johnson D, **Wise C**, Jackson AP, O'Driscoll M, Jeggo PA. Mutations in ORC1, encoding the largest subunit of the origin recognition complex, cause microcephalic primordial dwarfism resembling Meier-Gorlin syndrome. *Nat Genet*. 2011;43(4):350-5. Epub 2011/03/02. PMID: 21358633
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pre-replication complex gene mutations and 10 without molecular diagnosis. *Eur J Hum Genet*. 2012;20(6):598-606. PMID: 22333897

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55. Londono D, Buyske S, Finch SJ, Sharma S, **Wise CA**, Gordon D. TDT-HET: a new transmission disequilibrium test that incorporates locus heterogeneity into the analysis of family-based association data. *BMC Bioinformatics*. 2012;13:13. Epub 2012/01/24. PMID: 22264315
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in GPR126 are associated with adolescent idiopathic scoliosis. *Nat Genet*. 2013;45(6):676-9. PMID: 23666238

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Lovett M, Clines GA, **Wise CA**. Genetic Control of Limb Development. In: Herring JA, Birch J, editors. The Child with a Limb Deficiency. Illinois: American Academy Orthopaedic Surgeons; 1998. p. 13-24.

Swarkar S, **Wise C**. Current Understanding of Genetic Factors in Idiopathic Scoliosis. In: Kusumi, Dunwoodie, editors. The Genetics and Development of Scoliosis: Springer; 2010. p.167-90.

Swarkar S, **Wise C**. Orthopaedic Knowledge Update. In: Song, editor. Pediatric Orthopaedics: American Association of Orthopaedic Surgeons; 2011. p. 39-45.

Punaro M, **Wise C.** PAPA Syndrome. In: Hashkes, Laxer, Simon, editors. Textbook of Autoinflammation: Springer; 2017.

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Wise, C. and Rios J. Molecular Genetics of Pediatric Orthopaedic Disorders. Springer, New York, NY, 2015.

Patents

"Genetic Marker for Autoimmune Disorder", **Carol A. Wise**, Serial No. 60/287/893, issued 11/4/2003

"*CHD7* Gene Polymorphisms are Associated with Susceptibility to Idiopathic Scoliosis", **Carol A. Wise**, Serial No. 11/566,215, issued 2/2/2010

Invited Presentations

"Molecular Genetic Analysis of PAPA Syndrome and Related Inflammatory Disease." *Baylor Institute for Immunology Research*, Dallas, TX, November, 2001.

"Molecular Characterization of PAPA syndrome, an Autoinflammatory Disorder." *Texas Genetics Society annual meeting,* Padre Island, TX, April, 2002.

"From Family History to Treatment--Applying Genetics to Clinical Problems." *Texas Women's University*, Biology Department, Denton, TX, April 2004.

"Genetics and Pediatric Disorders." *University of North Texas Biology Department*, Denton, TX, November 16, 2005.

"Juvenile Forms of Familial Arthritis", *Genetics of Juvenile Arthritis meeting*, University of Cincinnati, Cincinnati, OH, September 8, 2006.

"Genetic Studies of Orthopaedic Disorders: Susceptibility to Adolescent Idiopathic Scoliosis", *Austin College Department of Biology Seminar Series*, Austin College, Sherman, TX, September 30, 2007.

"CHD7 Polymorphisms Associated with Susceptibility to Idiopathic Scoliosis", *American College of Medical Genetics annual meeting,* session Straightening out the Curves: Understanding the Genetic Basis of Idiopathic and Congenital Scoliosis, Phoenix, AZ, March 16, 2008.

"Gene discovery for idiopathic scoliosis, a complex disease of childhood", *Department of Genetics Seminar series*, Rutgers, the State University of New Jersey, Piscataway, NJ, March 31, 2008.

"Understanding Genetic Factors in Idiopathic Scoliosis", *American College of Medical Genetics annual meeting,* session Straightening out the Curves: Understanding the Genetic Basis of Idiopathic and Congenital Scoliosis, Phoenix, AZ, March 15, 2008.

"Genetics of idiopathic scoliosis: Insights into a common and complex disease of childhood", *Brandon Carroll annual symposium*, Nurses continuing education, Dallas, TX, April 1, 2008.

"Genetics of Idiopathic Scoliosis: Insights into a common and complex disease of childhood", *NICHD Structural Birth Defects Meeting*, Linthicum Heights, MD, May 12-14, 2008.

"Genetics of idiopathic scoliosis: Insights into a common and complex disease of childhood", *Nuffield Orthopaedic Center*, University of Oxford, Oxford, UK, April 22, 2009.

"Is genetic research of any use to the scoliosis surgeon?" *British Scoliosis Society annual meeting*, Leicester, UK, April 23-24, 2009.

"Genetics of idiopathic scoliosis, insights into a common and complex disease of childhood", *Musculoskeletal Genetics Symposium, Louis V Avioli Bone Research seminar series,* Washington University St. Louis School of Medicine, St. Louis, MO June 19, 2009.

"Genome-wide study reveals chromosome 3 variants associated with idiopathic scoliosis", *NICHD Structural Birth Defects Meeting,* Bethesda, MD, November 9-10, 2009.

"Understanding Idiopathic Scoliosis", *Texas Genetics Society annual meeting*, Dallas, Texas, March 31-April 2, 2011.

"Gene discovery for a familial form of osteofibrous dysplasia", *Brandon Carroll annual symposium*, Dallas, TX, April 27, 2012.

"Population study of idiopathic scoliosis", *Interdisciplinary Research Conference,* Children's Medical Center, Dallas, TX, February 26, 2013.

"Gene discovery, new biology, new treatment: studies of pediatric orthopedic disorders", *Clinical Research Conference*, University of Texas Southwestern Medical Center, Dallas, TX, March 20, 2013.

"Candidate genes for idiopathic scoliosis identified by GWAS and next-generation sequencing", *NICHD Structural Birth Defects Meeting*, Rockville, MD, August 9-11, 2013.

"Genetics of Scoliosis: an International Effort", Keynote address, *50th International Phillip Zorab Symposium,* London, UK, June 21, 2013.

"Re-thinking the name: applying next-generation methods to idiopathic scoliosis", *Orthopedic Grand Rounds*, University of Kentucky, October 2, 2013.

"Understanding scoliosis and osteogenesis imperfect", *Croucher Advanced Study Institute, Integrated Approaches to Understanding Disorders of the Skeleton*, Hong Kong, December 16-2013, 2013.

"Molecular Genetics Interest Group", University of Texas Southwestern Medical Center, Dallas, TX, February 26, 2014.

"Is there a biologic link between congenital and idiopathic scoliosis?", 36th Annual Brandon Carrell Visiting Professorship, Texas Scottish Rite Hospital for Children, Dallas, TX, May 30, 2014.

"A PAX1 enhancer locus increases risk of idiopathic scoliosis in females", *NICHD Structural Birth Defects Meeting*, Rockville, MD, December 7-9, 2014.

"Genomics of Orthopedic Disorders at TSRHC", *Texas A&M Baylor College of Dentistry, Pathways to Excellence Seminar Series,* Dallas, TX, January 20, 2016.

"GOOD for Kids: From Genomics to Potential Therapies for Human Bone Dysplasias", UT Southwestern Charles and Jane Pak Center for Mineral Metabolism and Clinical Research, May 13, 2016.

"Twisted Logic: What Keeps the Spine Straight?", *Duke University School of Medicine*, *Zebrafish and Etiology of Spine Deformity Symposium,* Durham, NC, September 7, 2016.

"Developmental Mechanisms of Human Idiopathic Scoliosis", *National Institutes of Child Health and Human Development National Birth Defects Workshop*, Bethesda, Maryland, May 21, 2017.

"GOOD for Kids: Genomics in a Pediatric Orthopaedic Setting", *Children's Research Institute*, Dallas, TX, October 24, 2017.

"GOOD for Kids: Genomics in a Pediatric Orthopaedic Setting", *Excellence in Immunology Seminar Series,* University of Texas Southwestern Medical Center, Dallas, TX, November 1, 2017.

Oral conference presentations

1. "Evidence of susceptibility loci in genome wide searches of familial idiopathic scoliosis", *Brandon Carrell annual symposium*, Texas Scottish Rite Hospital for Children, Dallas, TX, May 2000.

2. "Evidence of susceptibility loci in genome wide searches of familial idiopathic scoliosis." **Wise CA**, Herring JA, Gillum JD, Gunn HC, Lovett M, Bowcock AM. *Scoliosis Research Society annual meeting,* Cairns, Australia, September 2000.

3. "Positional cloning of candidate genes for familial idiopathic scoliosis." **Wise CA**, Herring JA, Gillum JD, Zhang D, Lovett M, Bowcock AM. *Scoliosis Research Society annual meeting*, Cleveland, OH, September 2001.

4. "Mutations in CD2BP1 that disrupt PTP PEST binding cause the allelic disorders familial recurrent arthritis and PAPA syndrome." **Wise CA**, Gillum JD, Seidman CE, Veile R, Bashiardes S, Lovett M. *American Society of Human Genetics* annual meeting, San Diego, CA, October 2001.

5. "Molecular Characterization of PAPA syndrome, an Autoinflammatory Disorder", *Clinical Genetics Grand Rounds,* UTSWMC, Dallas, TX, August, 2002.

6. "Identification and analysis of candidate genes for familial idiopathic scoliosis." **Wise CA**, Herring JA, Weirich K, Edwards L, Lovett M, Bowcock AM. *Scoliosis Research Society annual meeting,* Seattle, WA, September 2002.

7. "Localization and Analysis of Candidate Genes for Idiopathic Scoliosis." *Center for Excellence in Spine Research*, Texas Scottish Rite Hospital for Children, Dallas, TX, September 2003.

8. "Localization and Analysis of Candidate Genes for Idiopathic Scoliosis." *Fondation Cotrel, Institut-de-France*, Paris, France, November 2003.

9. "Genetics and Clinical Presentation of Larsen Syndrome." *Clinical Genetics Grand Rounds,* UTSWMC, Dallas, TX, March, 2004

10. “Mapping susceptibility to idiopathic scoliosis.” Herring JA, Gao X, Cain N, C Helms C, Browne R, Zhang D, Swaney S, Bashiardes S, Bowcock A, Lovett M, **Wise C**, *Pediatric Orthopaedic Society North America annual meeting*, Ottawa City, Ottawa, Canada, May 2005.

11. ”Localizing susceptibility to adolescent idiopathic scoliosis.” **CA Wise**, X Gao, NM Cain, RH Browne, C Helms, DP Zhang, SL Swaney, M Lovett, AM Bowcock, JA Herring. *Scoliosis Research Society annual meeting*, Miami Beach, FL, October 2005.

12. “Evidence for the 8q candidate region in susceptibility to adolescent idiopathic scoliosis.” Gao X, Herring JA, Cain NM, Gillum JD, Browne RH, Helms C, Swaney SS, Zhang D, Shoemaker S, Lovett M, Bowcock A, **Wise CA**. *Eleventh International Phillip Zorab symposium*, Oxford, UK, April 2006.

13. “Linkage and association of the CHD7 gene with susceptibility to adolescent idiopathic scoliosis.” **Wise C**, Gao X, Gordon D, Gillum J, Browne R, Helms C, Zhang D, Shoemaker S, Lovett M, Bowcock A, Herring J. *American Society of Human Genetics annual meeting*, New Orleans, LA, October 2006**.**

14. “The CHD7 Gene is a Candidate for Susceptibility to Idiopathic Scoliosis.” **Wise C**, Gao X, Gordon D, Zhang D, Browne R, Helms C, Dobbs MB, Morcuende JA, Sheffield VC, Lovett M, Bowcock A, Herring J. *Pediatric Orthopaedic Society of North America annual meeting,* Hollywood, FL, May 2007.

15. “A gene for idiopathic scoliosis suggests etiologic overlap with CHARGE syndrome.” **Wise CA**, Gao X, Gordon D, Zhang D, Browne RH, Helms C, Dobbs MB, Morcuende JA, Sheffield VC, Lovett M, Bowcock A, Herring J. *Scoliosis Research Society annual meeting*, Edinburgh, Scotland, September, 2007.

16. “Genetics of idiopathic scoliosis: Insights into a common and complex disease of childhood”, *International Cotrel Symposium,* Paris, France, October 13, 2008.

17. “Genome-wide association studies of idiopathic scoliosis”, *Brandon Carrell symposium*, Texas Scottish Rite Hospital for Children, Dallas, TX, April 16, 2010.

18. “Genetics of pediatric musculoskeletal disorders”, *Works-in Progress, Genes and Development training program*, University of Texas Southwestern Medical Center, April 16, 2010.

19. “Genome-wide Study Reveals Region of Chromosome 3 Associated with Idiopathic Scoliosis”, *Pediatric Orthopaedic Society of North America annual meeting,* Waikoloa, Hawaii, May 4-7, 2010.

20. “Genome-wide Study Reveals Genetic Loci Associated with Idiopathic Scoliosis”, *Scoliosis Research Society annual meeting,* Kyoto, Japan, September 20-24, 2010.

21. “Genome-wide Association Studies of Adolescent Idiopathic Scoliosis Suggest Axon Guidance Molecules as Candidates for Disease”. *11th International Philip Zorab symposium*, Royal College of Surgeons London, UK, March 18, 2011.

22. “Candidate genes for idiopathic scoliosis identified by GWAS and next-generation sequencing”. *National Institutes of Child Health and Human Development National Birth Defects Workshop*, Bethesda, Maryland, August 2011.

23. “Gene discovery in early onset scoliosis”. Fondation Cotrel annual meeting, Paris, France, November 2, 2011.

24. “Is Idiopathic Scoliosis a Latent Neural Tube Disease?” Pediatric Orthopedic Society of North America annual meeting, Denver, CO, May 2012. (Best basic science paper nominee).

25. “Idiopathic Scoliosis Mutations in *VANGL1*, a Neural Tube Development Gene” Scoliosis Research Society annual meeting, Chicago, IL, September 2012 (received Russell A. Hibbs Basic Science Award).

26. “A New Genetic Locus Increases Risk of Idiopathic Scoliosis in Females” Scoliosis Research Society annual meeting, Anchorage, AK, September 2014 (nominated for Russell A. Hibbs Basic Science Award).

27. “A *PAX1* Enhancer Locus Increases Risk of Idiopathic Scoliosis in Females”, American Society of Human Genetics annual meeting, San Diego, CA, October 2014.

28."Mutations in the *MET* proto-oncogene cause osteofibrous dysplasia by altering the regulation of periosteal osteogenesis." American Society of Human Genetics annual meeting, Baltimore, MD, October 9, 2015.

29. “Developmental Mechanisms of Human Idiopathic Scoliosis”, *National Institutes of Child Health and Human Development National Birth Defects Workshop*, Bethesda, Maryland, May 21, 2017.

Presentations to General Public

"Research at TSRHC", Kerrville Appreciation Dinner, Kerrville, TX, September 2000.

"Research at TSRHC", Fort Worth Appreciation Dinner, Ft. Worth, TX, September 2002.

"What's up with Scoliosis?", TSRHC Brace support group, TSRHC, Dallas, TX, November 19, 2002.

"Tracking DNA Culprits, Or How to Find the Bad Guys", Mystery Writers of America meeting, TSRHC, Dallas, TX, August 9, 2003.

"Molecular Genetics", TSRHC clinic laboratory continuing education, Texas Scottish Rite Hospital for Children, Dallas, TX, July 28, 2005.

"Scoliosis Genetics Research at TSRHC", TSRHC Supper Club, Texas Scottish Rite Hospital for Children, Dallas, TX, August 10, 2007.

"Discovering Cures at TSRHC", Knox-Corinthian Lodge meeting, Texas Scottish Rite Hospital for Children, Dallas, TX, August 23, 2007.

"Molecular Genetics at TSRHC: Integrating Basic Research and Clinical Care", Appreciation luncheon, Texas Scottish Rite Hospital for Children, Dallas, TX, October 30, 2007.

"Molecular Genetics Research", Retirement luncheon, Texas Scottish Rite Hospital for Children, Dallas, TX, November 7, 2007.

"Genetics Research at TSRHC", TSRHC Trustee brunch, Brookhollow Country Club, Dallas, TX, January 17, 2008.

"Scoliosis Research at TSRHC", TSRHC Leadership Workshop, Dallas, TX, February 26, 2008.

"Genetics Research at TSRHC", San Angelo appreciation dinner, San Angelo, TX, May 1, 2008.

"Identifying genes for idiopathic scoliosis", John L. DeGrazier Lodge, Dallas, TX, May 13, 2008.

"Well, how did we get here?" Baylor College of Dentistry, Dallas, TX, February 9, 2009.

"Family-based genetic studies: what TSRHC families have taught me", Texas Scottish Rite Hospital for Children Crayon Club, Dallas, TX, April 14, 2009.

"Family-based studies at TSRHC: lessons learned from TSRHC families", TAHV President's Council meeting, Texas Scottish Rite Hospital for Children, Dallas, TX, September 9, 2009.

"Generations at TSRHC", Texas Young Professionals Association of Secretaries (TYPOS), Texas Scottish Rite Hospital for Children, Dallas, TX, March 9, 2010.

"Genetic Research at TSRHC", University of Texas at Tyler Nursing program, Texas Scottish Rite Hospital for Children, Dallas, TX, March 18, 2010 (written by CWise, presented by D. Zhang).

"TSRHC Research Overview", Associate Leadership Council, Texas Scottish Rite Hospital for Children, Dallas, TX, May 14, 2010.

"Hospital-based Research at TSRHC", University of Texas at Tyler Nursing program, Texas Scottish Rite Hospital for Children, Dallas, TX, October 28, 2010; March 3, 2011; March 24, 2011.

"Growing up: what we have learned from the smallest people in the world". Richland College Health Science Career Day, March 31, 2011.

"Primordial Registry at Texas Scottish Rite Hospital for Children", National Little People of America meeting, Dallas, TX, July 2-3, 2012.

"Molecular Genetics at Texas Scottish Rite Hospital for Children", Cotton Patch Café appreciation luncheon, Texas Scottish Rite Hospital for Children, July 19, 2012.

"Molecular Genetics at Texas Scottish Rite Hospital for Children", Ladies Oriental Shrine appreciation, Texas Scottish Rite Hospital for Children, July 30, 2012.

"Molecular Genetics at Texas Scottish Rite Hospital for Children", Texas Auctioneers Association, Texas Scottish Rite Hospital for Children, December 3, 2012.

"Molecular Genetics at Texas Scottish Rite Hospital for Children", Dallas Young Lawyers Association, Texas Scottish Rite Hospital for Children, December 4, 2012.

"Molecular Genetics at Texas Scottish Rite Hospital for Children, from Causes to Cures", Trustee Wives Brunch, Brook Hollow Golf Club, Dallas, TX, January 24, 2013.

"Molecular Genetics at Texas Scottish Rite Hospital", Inn of Courts, Texas Scottish Rite Hospital for Children, April 15, 2014.

"TSRHC Molecular Genetics: GOOD for Kids", Color of Friendship, Texas Scottish Rite Hospital for Children, April 15, 2014.

"TSRHC Molecular Genetics: GOOD for Kids", Rotary Club, Dallas Sheraton Hotel, May 27, 2014.

"TSRHC Molecular Genetics: GOOD for Kids", 12th Man Foundation, Texas Scottish Rite Hospital for Children, September 23, 2014.

"TSRHC Molecular Genetics: GOOD for Kids", Horseshoe Bay Group, Texas Scottish Rite Hospital for Children, October 29, 2014.

"Genetics of Orthopaedic Disorders: GOOD for Kids", Ebbie Halliday Group, April 3, 2015.

"Genetics of Orthopaedic Disorders: GOOD for Kids", Rice High School, April 15, 2015.

"TSRHC Basic Research Program: Working Toward Cures", Crayon Club, Texas Scottish Rite Hospital for Children, August 10, 2017.