CURRICULUM VITAE

Leigh Darryl Quarles, M.D.

Revised 09/30/2019

Birth Date: August 4, 1953

Marital Status: Married to Anne Walker Quarles, R.N.
Clinical Study Coordinator

Children: Jackson (Jeb) H. Quarles, February 15, 1980, Franklin & Marshall 2002
Leigh W. Quarles, November 30, 1981, Mount Holyoke College 2004, Columbia University MPH 2009.
Scott D. Quarles, August 4, 1986, Indian Springs School 2005, Birmingham Southern College 2009

Grandchildren: Emma Leigh Quarles, January 20, 2012
Jamison Hall Quarles, January 20, 2012
August Eric Farmer, October 20, 2015
TBN girl, Fall 2019

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Memphis TN 38163
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Education: Indian Springs School, 1971
B.S., Duke University, Magna Cum Laude, 1975
M.D., University of Alabama in Birmingham, 1979

Academic and Professional Positions:

1979-1980	Intern (Medicine) University of Alabama in Birmingham Medical Center
1980-1982	Resident (Medicine) University of Alabama in Birmingham Medical Center
1982-1985	Clinical and Research Fellow, Nephrology/Endocrinology Duke University Medical Center
1985-1986	Associate in Medicine Duke University Medical Center
1986-1992	Assistant Professor of Medicine Duke University Medical Center Associate in Pathology Duke University Medical Center
1993-1999	Associate Professor of Medicine (Tenured) Duke University Medical Center

	Associate in Pathology Duke University Medical Center
1999-2004	Professor of Medicine Duke University Medical Center Associate in Pathology Duke University Medical Center
1999-2000	Director, Center of Bone and Mineral Metabolism Duke University Medical Center
January 2001- March 2004	Director, Duke Center for Bone and Mineral Disorders Duke University Medical Center
March 2004- March 2008	Vice Chair for Research, Department of Internal Medicine University of Kansas Medical Center
March 2004- December 2009	Summerfield Endowed Professor of Medicine Director, The Kidney Institute and Division of Nephrology University of Kansas Medical Center
December 2009- Present	UTMG Professor, Director, Division of Nephrology, Department of Medicine Associate Dean for Research, College of Medicine University of Tennessee Health Science Center

Honors/Committees:

National Institutes of Health Sponsored Research Fellowship at Duke University, 1982 -1985
Short Course in Medical & Experimental Mammalian Genetics, Bar Harbor, ME, 1991
Scientific Advisory Committee, Hoffman-La Roche, Inc., 1991, 1993, 1994
Member, Ad Hoc Review Committee, Orthopedics and Musculoskeletal Study Section, 1995
Member, Review Committee, Orthopedics and Musculoskeletal Study Section, Oct. 1995-1999
American Society of Clinical Investigation (ASCI), 1996 to present
Editorial Board, Journal of Bone and Mineral Research, September 1996-2005
Deputy Editor, Journal of Bone and Mineral Research, July 1997-2003
Bone and Mineral Metabolism Editorial Board, Up-to-Date, 1995-present
Scientific Advisory Committee, Amgen, Inc. 2001-2005
Publications Committee American Society of Bone and Mineral Research 2002-2005
Association of American Physicians (AAP), 2004 to present
Society of Osteobiology, 2006 to present
Coburn Endowed Lecture-ASN 2009
Editorial Board, International Bone & Mineral Society, BoneKEy, 2010
Memphis Research Consortium Planning Committee, 2010
Associate Research Dean's Committee, 2010
Hyde Chair Search Committee, 2010
InMotion Board, 2010-2012
ASN Kidney Week Reviewer, 2012
CON Associate Dean of Research- Search Committee, 2013
Search Committee for Governor's Chair in Health Informatics, 2013
Search Committee for Vice Chancellor for Research, 2013

Faculty recruitment committee- Department of Orthopaedic Surgery and Biomedical Engineering, 2013
ASN Kidney Week Reviewer, 2013
Physician Assistant Program Organizing Committee 2013
Pediatric Nephrology Search Committee 2013
UTHSC Research Committee, 2013
University of Tennessee Research Foundation Board 2014 to present
Department of Surgery Chair Search Committee, 2014
UTRF Board Committee, 2014-2017
Department of Pathology Chair Search Committee, 2015
Methodist Hospital, West Cancer Clinic Executive Board, 2015 to 2019
UTHSC Research Space Allocation Committee, 2015 to present

Reviewer for Journals:

American Journal of Kidney Diseases
American Journal of Nephrology
American Journal of Physiology: Endocrinology & Metabolism
Biochemical and Biophysical Research Communications
Biochimica et Biophysica Acta
Bone
Endocrinology
Genomics
Journal of the American Society of Nephrology
Journal of Bone and Mineral Research
Journal of Cellular Biochemistry
Journal of Cellular Physiology
Journal of Clinical Endocrinology &
Journal of Clinical Investigation
Kidney International
Nephrology, Dialysis, Transplantation

Medical License:

Tennessee License #:MD0000045610
North Carolina License #: 26353

Specialty Board Certification:

American Board of Internal Medicine, Diplomate, 1982
Diplomate in the Subspecialty of Nephrology, 1986

Societies:

International Society of Nephrology
American Society of Nephrology
American Society for Bone and Mineral Research

American Federation for Clinical Research
American Society of Clinical Investigation
The Endocrinology Society
Society of Osteobiology
Association of American Physicians

Current Support:

Source: National Institutes of Health (1R61AR073518-01)
Title: Polycystins/TAZ as a novel therapeutic target to treat osteoporosis
Period of Support: 04/01/2018-03/31/2020
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $250,000
Total Direct Costs: $500,000

Source: National Institutes of Health (1R01AR071930-01A1)
Title: Skeletal Functions of Polycystins and TAZ
Period of Support: 08/24/2018-06/30/2023
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $220,000
Total Direct Costs: $1,078,000

Source: Inozyme Pharma
Title: Testing Small Molecule for FGF23 Antagonist
Period of Support: 01/01/2019-10/19/2019
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $274,853
Total Direct Costs: $274,853

Source: National Institutes of Health (1R01DK121132-01)
Title: Optimization of Novel Small Molecules to Antagonize FGF-23
Period of Support: 07/01/2019-06/30/2024
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $200,000
Total Direct Costs: $1,000,000

Pending Support:

Source: National Institutes of Health (1R01DK120567-01A1)
Title: Genetic and Environmental Determinants of GPRC6A Regulation of Energy Metabolism Using Genetically Engineered Mice and Systems Biology
Period of Support: 09/01/2019-08/31/2024
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $383,786
Total Direct Costs: $1,994,592

Past Support:

Source: National Institutes of Health (1R01AR045955-14)
Title: Regulation and Function of FGF23
Period of Support: 09/01/2012 – 08/31/2017
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $250,000
Total Direct Costs: $1,250,000

Source: National Institutes of Health (1R01DK095812-02)
Title: Discovery of an Osteocalcin Sensing GPCR Regulating Beta-Cell Function
Period of Support: 04/01/2013-03/31/2017
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $230,000
Total Direct Costs: $920,000

Source: National Institutes of Health (3R01AR045955-15S1)
Title: Regulation and Function of FGF23
Period of Support: 04/01/2014 – 08/31/2015
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $100,000
Total Direct Costs: $100,000

Source: National Institutes of Health (2R01DK083303-05)
Title: Extrarenal Functions of Polycystin-1
Period of Support: 07/01/2010 – 06/30/2015
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $250,000.00
Total Direct Costs: $1,080,000

Source: ADA
Title: GPRC6A mediates the effect of osteocalcin on insulin secretion and sensitivity
Period of Support: 11/01/2013-10/31/2014
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $51,000
Total Direct Costs: $51,000

Source: Amgen
Title: Role of FGFRs in FGF-23 Associated Left Ventricular Hypertrophy
Period of Support: 11/01/2012 – 10/31/2014
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $125,000
Total Direct Costs: $250,000

Source: National Institutes of Health (R01-AR037308-24)
Title: Extracellular Calcium-Sensing Receptors in Osteoblasts
Period of Support: 08/01/1986 – 08/31/2011
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $250,000
Total Direct Costs: $1,000,000

Source: National Institutes of Health (R56 AR 0455955-12)
Title: Regulation and Function of FGF23
Period of Support: 07/01/10-06/30/11 (NIH Bridge Award)
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $250,000
Total Direct Costs: $250,000

Source: University of Kansas Medical Center through NIH (3P50DK057301-11S1)
Title: Kansas Interdisciplinary Center for PKD Research
Period of Support: 12/12/2009-12/11/2010
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $115,407
Total Direct Costs: $115,407

Source: National Institutes of Health (T32 DK071496-01)
Title: University of Kansas Training Grant in Nephrology
Period of Support: 07/01/06-06/30/11
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $117,884
Total Direct Costs: $1,087,968

Source: National Institutes of Health (Subproject to L. Bonewald NIH grant)
Title: Effects of Mechanical Strain on Osteocyte Function
Period of Support: 07/01/06-06/30/11
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $66,000
Total Direct Costs: $97,020

Source: National Institutes of Health (R01-AR37308)
Title: Pharmacologically Induced Neo-osteogenesis
Period of Support: February 16, 2001 - December 31, 2005
Principal Investigator: L. Darryl Quarles, M.D.
Yearly Direct Costs: $237,500
Total Direct Costs: $1,187,500

Source: NIH 1-R24-DK58775-01
Title: Functional Genomics Center

Period of Support: September 30, 2000 - September 29, 2003
Principal Investigator: Joseph R. Nevins, Ph.D. (L. Darryl Quarles; Co-Investigator)
Yearly Direct Costs: $349,210
Total Direct Costs: $1,047,631

Source: National Institutes of Health (R01-DK53982)
Title: Genetics of Familial Focal Segmental Glomerulosclerosis
Period of Support: July 1, 1999 - June 30, 2003
Principal Investigator: L. Darryl Quarles, M.D.

Source: National Institutes of Health (R01-AR-47636)
Title: Parathyroid Hormone and Osteoblast Mitogenesis.
Period of Support: August 1, 2002 – July 31, 2003
Principal Investigator: Louis M. Luttrell, M.D. (L. Darryl Quarles; Co-Investigator)
Yearly Direct Costs: $183,000
Total Direct Costs: $915,000

Source: Glaxo-SmithKline-Beecham Corp.
Title: Microarray Analysis of *Cbfa1*-induced Program
Period of Support: May 1, 2001 – April 30, 2002
Principal Investigator: L. Darryl Quarles, M.D.

Source: Japan-Tobacco
Title: Isolation and Cloning of the Osteoblastic Calcium Sensing Receptor: ObCasR
Period of Support: June 1, 2001 - May 31, 2002
Principal Investigator: L. Darryl Quarles, M.D

Source: National Institutes of Health (RO1-AR27032)
Title: Pathogenesis of Vitamin D Refractory Diseases
Period of Support: July 1, 1999 - June 30, 2002
Principal Investigator: Marc K. Drezner, M.D.

Source: National Institutes of Health New Investigator Research Award-R23
Title: Pathogenesis of Aluminum-induced Bone Histogenesis
Period of Support: August 1, 1986 - July 31, 1989
Principal Investigator: L. Darryl Quarles, M.D.

Source: Whitby-Ethel Corporation
Title: Effects of Aluminum, Zeolites and Related Materials on Bone
Period of Support: August 27, 1987 - October 14, 1991
Principal Investigator: Marc K. Drezner, M.D./L. Darryl Quarles, M.D. (Co-Investigators)

Source: Hoffman-La Roche, Inc. (729-92-6)
Title: Comparison of Pulse Oral with Intravenous Calcitriol

Period of Support: July 1, 1991 - December 31, 1992
Principal Investigator: L. Darryl Quarles, M.D.

Source: National Institutes of Health (R01-AR40586)
Title: Mutational Analysis of Type I Collagen Function in Matrix
Period of Support: August 1, 1991 - July 31, 1995
Principal Investigator: Richard J. Wenstrup, M.D.
(L. Darryl Quarles, M.D.; Co-Investigator)

Source: National Institutes of Health (R01-AR37308)
Title: Pharmacologically Induced Neo-osteogenesis
Period of Support: May 1, 1991 - April 30, 1995
Principal Investigator: L. Darryl Quarles, M.D.

Source: Hoffman-La Roche, Inc. (1344-94-10)
Title: Comparison of Oral CaCO3, Oral and Intravenous Calcitriol Administration in Mild Secondary Hyperparathyroidism in Hemodialysis Patients.
Period of Support: October 24, 1994 - December 31, 1996
Principal Investigator: L. Darryl Quarles, M.D.

Source: Sandoz Pharma, Ltd. (GCID #15724)
Title: Sandoz Collaboration Sponsored Research and Option Agreement - Osteoblastic Cation-Sensing Receptor
Period of Support: December 1, 1995 - December 31, 1996
Principal Investigator: L. Darryl Quarles, M.D.

Source: National Institutes of Health (RO1-AR43468)
Title: Role of bHLH Proteins in Osteoblast Development:
Period of Support: April 1, 1995 - March 31, 1999
Principal Investigator: L. Darryl Quarles, M.D.

Source: Amgen, Inc. (#990740)
Title: A Double-Blind, Randomized, Placebo-Controlled, Multicenter Research Study to Assess the Safety and Efficacy of an Oral Calcimimetic Agent (AMG073) in Secondary Hyperparathyroidism of End-Stage Renal Disease (ESRD) Allowing Dose Adjustments in Vitamin D Analog Concomitant Therapy
Period of Support: July 1, 1999 - October 31, 2000
Principal Investigator: L. Darryl Quarles, M.D.

Former Post-Doctoral Fellows:	**Current Position**
M. Gayle Murphy, M.D.	Private Practice

5200 Villa View #3B Farmington, NM 87402	
Daniel Yohay, M.D. 3013 Laurence Crescent Flossmoor, IL 60422	Private Practice
Susan Galbraith, M.D. Division of Endocrinology Yale University School of Medicine New Haven, CT	Private Practice
J. Edward Hartle, M.D. Associate in Nephrology Penn State - Geisinger Medical Center 100 Academy Ave. Danville, PA 17822	Academic Physician
Suresh Siddhanti, Ph.D. Eli Lilly Co. Indianapolis, IN 46285	Industry
Olifur Indridison, M.D. Lyfaekningadeild, E-4 Landspitali Haskolasjukrahus Fossvogi, 108 Reykjavik Iceland	Academic Physician
Tirupapuli V. Damodaran, Ph.D. Pharmacology & Cancer Biology Duke University Medical Center Durham, NC 27710	Research Scientist, University
Qisheng Tu, M.D., Ph.D. Division of Oral Biology Tufts University School of Dental Medicine One Kneeland Street Boston MA 02111	Instructor
Leigh G. Simpson, Ph.D. Center for Bone and Mineral Disorders Duke University Medical Center Durham, NC 27710	Homemaker
Charles Burnham, Ph.D. Assistant Research Professor	Research Scientist, University

Division of Nephrology Duke University Medical Center Durham, NC 27710	
Nadine Tanenbaum, M.D. Division of Nephrology Washington University School of Medicine St. Louis, MO	Assistant Professor Washington University
Ping Fu, M.D., Ph.D. Division of Nephrology Duke University Medical Center Durham, NC 27710	Postdoctoral Fellow
Shiguang Liu, M.D., Ph.D. Genzyme	Industry
Aditi Gupta, M.B.B.S. Division of Nephrology University of Kansas Medical Center Kansas City, KS 66160	Assistant Professor KUMC
Brian Ringhofer, M.D.	Private Practice
Joni McCullagh	Private Practice
Qiang Luo, M.D., Ph.D. Christian Richard, Ph.D. Kansas City, MO	Returned to China Postdoctoral Fellow (UMKC)
Jason Stubbs, M.D. Division of Nephrology University of Kansas Medical Center Kansas City, KS 66160	Assistant Professor KUMC
Shiqin Zhang, Ph.D. Division of Nephrology University of Kansas Medical Center Kansas City, KS 66160	Postdoctoral Fellow
Jianping Zhou, Ph.D. Division of Nephrology University of Kansas Medical Center Kansas City, KS 66160	Postdoctoral Fellow

Nicolae V. David, Ph.D. — Research Associate Professor
Division of Nephrology and Hypertension
Northwestern University

Aline C. Martin, Ph.D. — Research Associate Professor
Division of Nephrology and Hypertension
Northwestern University

Xiaobin Han, M.D. Ph.D. — Research Assistant Professor
Department of Physiology
University of Tennessee Health Science Center

Current Post-Doctoral Fellows/Junior Faculty (former trainees):

Min Pi, Ph.D.
Research Associate Professor
Division of Nephrology
University of Tennessee Health Science Center
Memphis, TN 38163

Zhousheng Xiao, M.D., Ph.D.
Research Associate Professor
Division of Nephrology
University of Tennessee Health Science Center
Memphis, TN 38163

CITATION INDICES:	All	Since 2014
Citations	18534	6296
h-index	75	42
i10-index	180	115

PUBLICATIONS:

1. Quarles LD, Dennis VW, Gitelman H, Harrelson JM, Drezner MK. Aluminum deposition at the osteoid-bone interface. An epiphenomenon of the osteomalacic state in vitamin D-deficient dogs. J Clin Invest 75(5):1441-7, 1985
2. Quarles LD, Rutsky EA, Rostand SG. Staphylococcus aureus bacteremia in patients on chronic hemodialysis. Am J Kidney Dis 6(6):412-9, 1985
3. Quarles LD. The renal osteodystrophies: Therapeutic Principles. The Kidney 18:11-4, 1985
4. Quarles LD, Gittleman HJ, Drezner MK. Aluminum: Culprit or accessory in the genesis of renal osteodystrophy. Semin Nephrol 6(1):90-101, 1986

5. Fant GF, Dennis VW, Quarles LD. Late vascular complications of the subclavian dialysis catheter. Am J Kidney Dis 7(3):225-8, 1986
6. Quarles LD, Gitelman HJ, Drezner MK. Aluminum associated bone disease: What's in a name? J Bone Miner Res 1(5):389-90, 1986
7. Quarles LD, Drezner MK. Rickets and osteomalacia, in *Conn's Current Therapy*, Rakel RE, editor, Philadelphia, WB Saunders Company pp. 464-471, 1987
8. Quarles LD, Gitelman HJ, Drezner MK. Induction of de novo bone formation in the beagle. A novel effect of aluminum. J Clin Invest 81(4):1056-66, 1988
9. Schwab SJ, Quarles LD, Middleton JP, Cohan RH, Saeed M, Dennis VW. Hemodialysis-associated subclavian vein stenosis. Kidney Int 33(6):1156-9, 1988
10. Quarles LD, Davidai GA, Schwab SJ, Bartholomay DW, Lobaugh B. Oral calcitriol and calcium: efficient therapy for uremic hyperparathyroidism. Kidney Int 34(6):840-4, 1988
11. Quarles LD, Lobaugh B. Vertical cord of an ellipsoid: An accurate measure of osteoid seam width, in *Bone Morphometry,* Takahaski HE,editor, Nishimura, p.492, 1988
12. Quarles LD, Gitelman HJ, Drezner MK. Aluminum-induced de novo bone formation in the beagle. A parathyroid hormone-dependent event. J Clin Invest 83(5):1644-50, 1989
13. Quarles, L.D., Lobaugh, B.: Equivalency of various methods for estimating osteoid seam width. J Bone Miner Res 4(5):671-677, 1989
14. Quarles LD, Divine G, Spritzer CE. Calcitriol for osteitis fibrosa. N Engl J Med 321:1832, 1989
15. Quarles LD. Attenuated bone aluminum deposition in nonuremic beagles with reduced bone remodeling. Am J Physiol 258(4 Pt 1):E576-81, 1990
16. Quarles LD, Murphy G, Vogler JB, Drezner MK. Aluminum-induced neo-osteogenesis: A generalized process affecting trabecular networking in the axial skeleton. J Bone Miner Res 5(6):625-35, 1990
17. Econs MJ, Feussner JR, Samsa GP,Effman EL, Vogler JB, Martinez S, Friedman NE, Quarles LD, Drezner MK. X-linked hypophosphatemic rickets without "rickets". Skeletal Radiol 20(2):109-14, 1991
18. Quarles LD. Paradoxical toxic and trophic osseous actions of aluminum: Potential explanations. Miner Electrolyte Metab 17:233-9, 1991
19. Quarles LD, Wenstrup RJ, Castillo SA, Drezner MK. Aluminum-induced mitogenesis in MC3T3-E1 osteoblasts: Potential mechanism underlying neoosteogenesis. Endocrinology 128(6):3144-51, 1991
20. Speer KP, Quarles LD, Harrelson JM, Nunley JA. Tetracycline labeling of the femoral head following acute intracapsular fracture of the femoral neck. Clin Orthop Relat Res 267:224-7, 1991
21. Nesbitt TL, Quarles LD, Drezner MK. Role of calcitriol in prevention of osteoporosis, in *Vitamin D: Chemical, Biochemical and Clinical Update,* Norman AW, Bouillon R, Thomasset M, editors, New York, Walter de Gruyter pp. 816-22, 1991
22. Quarles LD, Drezner MK. Aluminum accumulation in patients with chronic renal disease. N Engl J Med 325(3):208-9, 1991
23. Julian BA, Laskow DA, Dubovsky J, Dubovsky EV, Curtis JJ, Quarles LD. Rapid loss of vertebral mineral density after renal transplantation. N Engl J Med 325(8):544-50, 1991

24. Phillips CL, Lever LW, Quarles LD, Pinnell SR, Wenstrup RJ. Construction of a full-length murine Proα2(I) collagen cDNA by the polymerase chain reaction. J Invest Dermatol 97(6):980-4, 1991
25. Quarles LD, Murphy G, Econs MJ, Martinez S, Lobaugh B, Lyles KW. Uremic tumoral calcinosis: Preliminary observations suggesting an association with aberrant vitamin D homeostasis. Am J Kidney Dis 18(6):706-10, 1991
26. Julian BA, Quarles LD, Niemann KM. Musculoskeletal complications after renal transplantation: pathogenesis and treatment. Am J Kidney Dis 19(2):99-120, 1992
27. Quarles LD, Yohay DA, Lever LW, Caton R, Wenstrup RJ. Distinct proliferative and differentiated stages of murine MC3T3-E1 cells in culture: An in vitro model of osteoblast development. J Bone Miner Res 7(6):683-92, 1992
28. Quarles LD, Lobaugh B, Murphy G. Intact parathyroid hormone overestimates the presence and severity of parathyroid-mediated osseous abnormalities in uremia. J Clin Endocrinol Metab 75(1):145-50, 1992
29. Quarles LD, Drezner MK. Effects of etidronate-mediated suppression of bone remodeling on aluminum-induced de novo bone formation. Endocrinology 131(1):122-6, 1992
30. Quarles LD. Prednisone-induced osteopenia in Beagles: Variable effects mediated by differential suppression of bone formation. Am J Physiol 263(1 Pt 1):E136-41, 1992
31. Yohay D, Butterly DW, Schwab SJ, Quarles LD. Continuous arteriovenous hemodialysis: Effect of dialyzer geometry. Kidney Int 42(2):448-51, 1992
32. Quarles LD, Lyles KW. Spinal and femoral bone density in the beagle: Use of dual energy x-ray absorptionometry to assess experimental osseous disorders. Hologic, Inc, Hological Technical Note, August 1992
33. Wenstrup RJ, Lever LW, Phillips CL, Quarles LD. Mutations in the COL1A2 gene of type I collagen that result in nonlethal forms of osteogenesis imperfecta. Am J Med Genet 45(2):228-32, 1993
34. Kovalik EC, Schwab SJ, Quarles LD. Hollow fiber versus flat-plate dialysers in continuous arteriovenous hemofiltration/dialysis. Semin Dialysis 6:229-31, 1993
35. Quarles LD, Haupt D, Davidai G, Middleton JP. Prostaglandin F2 alpha-induced mitogenesis in MC3T3-E1 osteoblasts: Role of protein kinase C-mediated tyrosine phosphorylation. Endocrinology 132(4):1505-13, 1993
36. Malizos KN, Quarles LD, Seaber AV, Rizk WS, Urbaniak JR. An experimental canine model of osteonecrosis: characterization of the repair process. J Orthop Res 11(3):350-7, 1993
37. Lyles KW, Jackson TW, Nesbitt T, Quarles LD. Salmon calcitonin reduces vertebral bone loss in glucocorticoid-treated beagles. Am J Physiol 264(6 Pt 1):E938-42, 1993
38. Julian BA, Benfield M, Quarles LD. Bone loss after organ transplantation. Transplant Reviews 7:82-95, 1993
39. Galbraith SC, Quarles LD. Tertiary/Refractory secondary hyperparathyroidism. In: Primer on the Metabolic Bone Diseases and Disorders of Mineral Metabolism, 2nd edition, Favus MJ, editor, Raven Press pp. 159-63, 1993
40. Drezner MK, Nesbitt T, Quarles LD. Zeolite A: A potential successful therapy for osteoporosis. In: Osteoporosis: Fourth International Symposium On Osteoporosis and Consensus Development Conference, Proceedings 1993. Christiansen C, Riis B, editors. Handelstrykkereit Aalborg Aps, Aalborg, Denmark pp. 114-6, 1993

41. Yohay DA, Quarles LD. Clinical applications of parathyroid hormone immunoassays in patients with end stage renal disease. Semin Dialysis 6:305-11, 1993
42. Yohay DA, Zhang J, Thrailkill KM, Author JM, Quarles LD. Role of serum in the developmental expression of alkaline phosphatase in MC3T3-E1 osteoblasts. J Cell Physiol 158(3):467-75, 1994
43. Quarles LD, Yohay DA, Carroll BA, Spritzer CE, Minda SA, Bartholomay D, Lobaugh BA. Prospective trial of pulse oral versus intravenous calcitriol treatment of hyperparathyroidism in ESRD. Kidney Int 45(6):1710-21, 1994
44. Siddhanti SR, Quarles LD. Molecular to pharmacologic control of osteoblast proliferation and differentiation. J Cell Biochem 55(3):310-20, 1994
45. Quarles LD, Hartle JE 2nd, Middleton JP, Zhang J, Arthur JM, Raymond JR. Aluminum-induced DNA synthesis in osteoblasts: Mediation by a G-protein coupled cation sensing mechanism. J Cell Biochem 56(1):106-17, 1994
46. Indridason OS and Quarles LD. Oral versus Intravenous Calcitriol: Is the route of administration really important? Curr Opin Nephrol Hypertens 4(4):307-12, 1995
47. Thrailkill KM, Nagase H, Suzuki K, Serra DM, Foulkes JL, Quarles LD. Characterization of insulin-like growth factor-binding protein 5-degrading proteases produced throughout murine osteoblast differentiation. Endocrinology 136(8):3527-33, 1995
48. Thrailkill KM, Siddhanti SR, Foulkes JL, Quarles LD. Differentiation of MC3T3-E1 osteoblasts is associated with temporal changes in the expression of IGF-I and IGFBPs. Bone 17(3):307-13, 1995
49. Siddhanti SR, Hartle JE 2nd, Quarles LD. Forskolin inhibits protein kinase C-induced mitogen activated protein kinase activity in MC3T3-E1 osteoblasts. Endocrinology 136(11):4834-41, 1995
50. Galbraith SC, Quarles LD. Tertiary hyperparathyroidism and Refractory Secondary Hyperparathyroidism. In: Primer on the Metabolic Bone Diseases and Disorders of Mineral Metabolism, 3rd edition, Favus MJ, editor, Raven Press, pp.192-8,1996
51. Quarles LD, Indridason OS. Calcitriol administration in end-stage renal disease: intravenous or oral? Pediatr Nephrol 10(3):331-6, 1996
52. Butterly DW, Quarles LD. Osseous complications of renal transplantation. Semin Dialysis 9(4):1-7, 1996
53. Hartle JE 2nd, Prpic V, Siddhanti SR, Spurney RF, Quarles LD. Differential regulation of receptor-stimulated cyclic adenosine monophosphate production by polyvalent cations in MC3T3-E1 Osteoblasts. J Bone Min Res 11(6):789-99, 1996
54. Quarles LD, Siddhanti SR. Guanine nucleotide binding-protein coupled signaling pathway regulation of osteoblast-mediated bone formation. J Bone Miner Res 11(10):1375-83, 1996
55. Indridason OS, Heath H III, Khosla S, Yohay DA, Quarles LD. Non-suppressible parathyroid hormone secretion is related to gland in uremic secondary hyperparathyroidism. Kidney Int 50(5):1663-71, 1996
56. Quarles LD, Hartle JE, Siddhanti SR, Guo R, Hinson TK. A distinct cation-sensing mechanism in MC3T3-E1 osteoblasts functionally related to the calcium receptor. J Bone Miner Res 12(3):393-402, 1997
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