

CURRICULUM VITAE

QIAN CHEN, PHD

EDUCATION

Undergraduate	Fudan University, Shanghai, China B.S. Biochemistry, 1981-1985.
Graduate	Jiaotong University, Chinese Academy of Sciences Shanghai, China M.S. Program in Bioengineering, 1985-1986
Doctoral	Tufts University School of Medicine, PhD, Cell, Molecular and Developmental Biology, 1992

POSTGRADUATE TRAINING

Fellowship	Harvard Medical School, Massachusetts General Hospital Post-doctoral Fellow Cell and Molecular Biology, 1992-1994
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HONORS AND AWARDS

- Summer Fellowship, "Fundamental Problems in Vision Research" National Eye Institute, National Institutes of Health, Marine Biological Laboratory, Woods Hole, MA, 1992
- Postdoctoral Fellowship, Arthritis Foundation, Atlanta, GA, 1994-1996
- Outstanding Research Presentation Award, 15th Annual East Coast Connective Tissue Society Meeting, Piscataway, NJ, 1994
- J.V. Satterfield Arthritis Investigator Award (#1 Ranked Arthritis Investigator) Arthritis Foundation, Atlanta, GA, 1997-1999
- FIRST Award, NIH, Bethesda, MD, 1997-2002
- New Investigator Recognition Award, Orthopaedic Research Society, Rosemont, IL, 1998
- Independent Scientist Award (PHS-Research Career Development Award), National Institutes of Health, Bethesda, MD, 1998-2003
- Novartis Foundation Bursary, London, United Kingdom, 1999
- Kappa Delta Young Investigator Award, American Academy of Orthopaedic Surgeons, Rosemont, IL, 2000 (The highest award for orthopaedic researchers)
- Hinkle Society Award, Penn State College of Medicine, Hershey, PA, 2001 (The highest research award to a young faculty member in College of Medicine)
- Michael G. Ehrlich MD Endowed Chair in Orthopaedic Research, Alpert Medical School of Brown University, Providence, RI, 2002-present
- Trustee, Rhode Island Hospital Orthopaedic Foundation, 2006-present
- Director, NIH Center of Biomedical Research Excellence in Skeletal Health and Repair, Rhode Island Hospital/The Alpert Medical School of Brown University, 2007-present

ACADEMIC APPOINTMENTS

- Instructor, Department of Dermatology, Harvard Medical School, Boston, MA, 1994-1995.

- Assistant Professor, Department of Orthopaedics and Rehabilitation Department of Cellular and Molecular Physiology, The Pennsylvania State University, College of Medicine, Hershey, PA, 1995-2001.
- Associate Professor with early tenure, Department of Orthopaedics and Rehabilitation Department of Cellular and Molecular Physiology, The Pennsylvania State University, College of Medicine, Hershey, PA, 2001-2002.
- Professor of Medical Science with tenure (the only tenured PhD researcher among all clinical Departments), Alpert Medical School of Brown University, Providence, RI, 2002-present
- Vice Chair for Research, Department of Orthopaedics, Alpert Medical School of Brown University, Providence, RI, 2009-present.

OTHER PROFESSIONAL APPOINTMENTS

- Visiting Scientist, Department of Muscle Research, Boston Biomedical Research Institute, Boston, MA, 1986-1987.
- Research Fellow, Cutaneous Biology Research Center, Massachusetts General Hospital, Harvard Medical School, Boston, MA, 1992-1994.
- Assistant Cellular Biologist, Massachusetts General Hospital, Boston, MA, 1994-1995.
- Visiting Professor, Department of Oral Cell Biology, Vrije University, Amsterdam, Holland, 1999-2000.
- Editor, Basic Science Section, Current Opinions in Orthopaedics, 2002-2006
- Adjunct Professor, The First Affiliated Hospital and Frontier Institute of Science and Technology, Xi'an Jiaotong University, Xi'an, China, 2012-2017
- Director of Cell and Molecular Biology, Head, Orthopaedic Biological Research, Rhode Island Hospital, Providence, RI, 2002-present
- Michael G. Ehrlich MD Endowed Chair in Orthopaedic Research, Alpert Medical School of Brown University/Rhode Island Hospital, Providence, RI, 2002-present.

NATIONAL/INTERNATIONAL REVIEW AND ADVISORY COMMITTEES

- Study Section Reviewer, National Institute on Aging, Special Emphasis Panel and Member of PPG Site Visit, Bethesda, MD, 1998.
- Judge, Siemens Westinghouse Science and Technology Competition, Princeton, NJ, 1999.
- Ad hoc Reviewer, National Science Foundation, MCB-Signal Transduction and Regulation, Arlington, VA, 2001.
- NIH Study Section Reviewer, National Institute of Child Health and Human Development, Special Emphasis Panel, Bethesda, MD, 2001.
- Mail Reviewer, National Science Foundation, 2001
- Study Section Reviewer, National Institute on Aging, Special Emphasis Panel and Member of PPG Site Visit, Bethesda, MD, 2002.
- Organizer and Chair, Special Interest Session in "Matrilins and related cell and matrix adhesion molecules", The First Meeting of American Society of Matrix Biology, Houston, Tx, 2002.
- Ad hoc Reviewer, NIA (B) Study Section, National Institute on Aging, Bethesda, MD, 2002.

- Member, Advisory Panel in “ECM and Aging of Musculoskeletal System”, National Institute on Aging, Bethesda, MD, 2002.
- Ad hoc Reviewer, Project and Equipment Grant, Arthritis Research Campaign, Chesterfield, United Kingdom, 2002.
- Co-Chair, Scientific Committee, International Conference in Osteoporosis and Bone Research, Beijing, China, 2002.
- Modulator, Session on Growth Plate, Annual Meeting of Orthopaedic Research Society, Chicago, IL, 2002.
- Chair, Symposium in “Redefining ligament, joint, and suture in molecular age”, Experimental Biology, Washington, DC, 2002.
- Ad hoc Member, Department of Veterans Affairs Merit Review Subcommittee for Endocrinology-B, Washington, DC, 2003-2008.
- Chair, Symposium in Cell-Matrix Adhesion and Signaling, Experimental Biology, San Diego, CA, 2003.
- Ad hoc Member, NIH Study Section “Cellular Mechanisms in Aging and Development” (CMAD), Bethesda, MD, 2003-2008.
- Member, NIH/NIA P01 PPG Study Section, 2005
- Chair, Symposium on Limb Development and Formation, Experimental Biology 2006, San Francisco, CA, 2006.
- Ad hoc Member, NIH/National Institute of Child Health and Human Development PPG Study Section, 2006
- Member, NIH/Enabling Technologies for Tissue Engineering and Regenerative Medicine Study Section, 2007
- Organizer and Chair, Workshop on In vivo Imaging, Experimental Biology 2007, San Diego, CA, 2007.
- NIH Study Section Reviewer, National Institute of Child Health and Human Development, Special Emphasis Panel (K and T Training Grants), Bethesda, MD, 2007.
- Organizer and Chair, Workshop on Mouse Model of Osteoarthritis, Osteoarthritis Research Society International, Boston, MA, 2007.
- Chair, Symposium on Tissue Engineering in 3D, Experimental Biology 2008, San Diego, CA, 2008.
- Member, NIH/NIA P01 PPG Study Section, 2008
- Ad-hoc Member, SBSR Study Section, 2009
- Member, NIH/NIA P01 PPG Study Section, 2010
- Ad-hoc Member, NIAMS Special Emphasis Review Panel (CORT), Chevy Chase, MD, 2010.
- Member, National Institute on Aging “Stem Cell and Cartilage Repair” Advisory Panel, Bethesda, MD, 2010.
- Member, NIH RCMI-COBRE Special Emphasis Panel, 2010.
- Reviewer, Hong Kong Research Grants Council, 2010-present.
- Member, NIH/NCRR COBRE III Study Section Review, 2011.
- Ad hoc Member, NIH AMS Study Section Review, 2011.
- Reviewer, University of Kentucky Grant Review Panel, 2011
- Member, NIH/NIA P01 PPG Study Section, 2011
- Reviewer, NIH/NIAMS R15 Study Section, 2011
- Member, NIH/NCRR CTR Study Section, 2011
- Reviewer, Medical Research Council, United Kingdom, 2012.

- Ad hoc Member, NIH/NIAMS SBIR on Rare Musculoskeletal, Rheumatic, and Skin Diseases (R43), 2012
- Ad hoc Member, DOD Peer Reviewed Medical Research Program, 2012
- Member, NIH/NIAMS P50 Study Section, 2012
- Review Team Leader, Arthritis Foundation Research Grants, 2013
- Member, Department of Veterans Affairs Merit Review Subcommittee for Endocrinology-B, Washington, DC, 2013-2017.
- Member, NIH/NIAMS Building Interdisciplinary Research Team (BIRT) Study Section, 2013
- Ad hoc Member, NIAMS Special Emphasis Panel (K and R13-U13 Award), 2015
- Reviewer, PSI Foundation Research Grant, 2015
- Member, NIH/NIAMS P50 Study Section, 2016
- Member, NIH/NIAMS P50 Study Section, 2017
- Member, NIH/NIGMS IDeA-CTR Study Section, 2017
- Reviewer, NCRC Paediatric Research Project Grant, Ireland, 2017
- Member, NIH/NIGMS COBRE I Study Section, 2017
- Mail Reviewer, NIH/NIAMS RISK X02 Applications Review, 2017
- Reviewer, Canadian Chair Appointment Evaluation, Canada, 2018-2021
- Member, National Science Foundation EBMS-CASIS Review Panel, 2018
- Member, NIH/NIAMS R61/R33 Study Section, 2018
- Ad hoc Member, NIH/NIAMS T32 Institution Training Grant Study Section, 2018
- Member, NIH/NIGMS IDeA-CTR Study Section, 2018
- Member, NIH/NIGMS COBRE Phase II Study Section, 2019
- Chair, External Advisory Committee of COBRE for Translational Research Improving Musculoskeletal Health (SC-TRIMH), Clemson University, SC. 2019-present
- Mail Reviewer, NIH/NIAMS RISK X02 Applications Review, 2019
- Ad hoc Member, NIH/NIAMS T32 Institution Training Grant Study Section, 2019
- Member, External Advisory Committee of COBRE in Matrix Biology, Boise State University, ID, 2019-present

UNIVERSITY AND HOSPITAL COMMITTEES

- Member, Tenure and Promotion Committee, Department of Orthopaedics and Rehabilitation, The Pennsylvania State University, Hershey, PA, 2001-2002.
- Member, Lifespan Recombinant DNA Committee, Lifespan, Providence, RI, 2003.
- Member, Tenure, Promotions and Appointments Committee, Department of Orthopaedics, Alpert Medical School of Brown University, Providence, RI, 2003-present.
- Member, Lifespan Research Grant Review Committee, Providence, RI, 2004-2005

- Member, Tenure, Promotions and Appointments Ad hoc Committee for Department Chair of Ob-Gyn, Alpert Medical School of Brown University, Providence, RI, 2006
- Member, Cancer COBRE Review Committee, Rhode Island Hospital, Providence, RI, 2007
- Member, Tenure, Promotions and Appointments Ad hoc Committee for Biomedical Informatics, Alpert Medical School of Brown University, Providence, RI, 2015
- Member, Executive Committee, Graduate Program in Molecular Biology, Cell Biology and Biochemistry, Brown University, Providence, RI, 2012-2017
- Member, Tenure, Promotions and Appointments Ad hoc Committee for Department Chair of Pathology, Alpert Medical School of Brown University, Providence, RI, 2018

MEMBERSHIP IN SOCIETIES

- The American Society for Cell Biology, 1987-present.
- The New York Academy of Sciences, 1993-present.
- American Association for the Advancement of Science, 1990-present.
- American Society for Bone and Mineral Research, 1996-present. Advocacy Committee, 2007-2011
- Orthopaedic Research Society, 1995-present, Topic Chair: Cartilage, Synovium, and Meniscus, 1997-1999. Publication Advisory Board, 2017-present
- Osteoarthritis Society International, 1999-present.
- American Society of Matrix Biology, 2000-present.
- American Association of Anatomists, Publication Oversight Committee, 2003-2009.
- International Chinese Musculoskeletal Research Society, Permanent Member, 2003-present, Chairman, Board of Directors, 2003-2010,

ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

Total Citation: 6327, H-index: 43, i10-index: 90 (October, 2021)

Chen, Q., Taljanidisz, J., Sarkar, S., Tao, T. and Gergely, J.: Cloning, sequencing and expression of a full-length rabbit fast skeletal troponin-C cDNA. **FEBS LETTERS** 228(1):22-26, 1988. PMID: 3277860

Chen, Q., Gibney, E., Fitch, J.M., Linsenmayer, C., Schmid, T.M. and Linsenmayer, T.F.: Long range movement and fibril association of type X collagen through embryonic cartilage matrix. **Proc Natl Acad Sciences USA** 87:8046-8050, 1990. PMID: 2236017 / PMCID: PMC54889

Linsenmayer, T.F., Chen, Q., Gibney, E., Gordon, M.K., Marchant, J.K., Mayne, R. and Schmid, T.M.: Collagen types IX and X in the developing chick tibiotarsus: analysis of mRNAs and proteins. **Development** 111:191-196, 1991. PMID: 2015794

Chen, Q., Linsenmayer, C., Gu, H.H., Schmid, T.M., and Linsenmayer, T.F.: Domains of type X collagen: alteration of cartilage matrix by fibril association and proteoglycan accumulation. **J Cell Biol** 117:687-694, 1992. PMID: 1572897 / PMCID: PMC2289439

Chen, Q., Fitch, J.M., Linsenmayer, C., and Linsenmayer, T.F.: Type X collagen: Covalent crosslinking to hypertrophic cartilage-collagen fibrils. **Bone Mineral** 17:223-227, 1992. PMID: 1611311

- Chen, Q. and Linsenmayer, T.F.: Distributions of fibronectin in the developing avian cartilaginous growth plate. ***Prog Clin Biol Res*** 383B:495-504, 1993. PMID: 8115366
- Chen, Q., Fitch, Gibney, E., and Linsenmayer, T.F.: Type II collagen during cartilage and corneal development: Immunohistochemical analysis with an anti-telopeptide antibody. ***Develop Dynamics*** 196(1):47-53, 1993. PMID: 7687475
- Chen, Q., Gibney, E., Leach, R.M., and Linsenmayer, T.F.: Chicken tibial dyschondroplasia: a limb mutant with two growth plates and possible defects of collagen crosslinking. ***Develop Dynamics*** 196:54-61, 1993. PMID: 7687476
- Chen, Q., Johnson, D.M., Haudenschild, D.R., and Goetinck, P.F.: Progression and recapitulation of the chondrocyte differentiation program: cartilage matrix protein is a marker for cartilage maturation. ***Develop Biol.*** 172:293-306, 1995. PMID: 7589809
- Haudenschild, D.R., Tondravi, M.M., Hofer, U., Chen, Q., and Goetinck, P.F.: The role of coiled-coil α -helices and disulfide bonds in the assembly and stabilization of cartilage matrix protein subunits- A mutational analysis. ***J Biol Chem*** 270:23150-23154, 1995. PMID: 7559460
- Chen, Q., Johnson, D.M., Haudenschild, D., Tondravi, M., and Goetinck, P.F.: Cartilage matrix protein forms a type II collagen-independent filamentous network: analysis in primary cell cultures with a retrovirus system. ***Molec Biol Cell*** 6:1743-1753, 1995. PMID: 8590802 / PMCID: PMC301329
- Chen, Q., Johnson, D.M., Haudenschild, D., and Goetinck, P.F.: Cartilage matrix protein: expression patterns in chicken, mouse, and human. ***Ann NY Acad Sci*** 785:238-240, 1996. PMID: 8702140
- Linsenmayer, T.F., Long, F., Nurminskaya, M., Chen, Q., and Schmid, T.M.: Type X collagen and other up-regulated components of the avian hypertrophic cartilage program. ***Prog Nucleic Acid Res Molec Biol*** 60:79-110, 1998. PMID: 9594572
- Chen, Q., Zhang, Y., Johnson, D.M., and Goetinck, P.F.: Assembly of a novel cartilage matrix protein filamentous network: molecular basis of differential requirement of vWF A domains. ***Molec Biol Cell*** 10:2149-2162, 1999. PMID: 10397755 / PMCID: PMC25427
- Zhang, Y., Chen, Q.: The noncollagenous domain 1 of type X collagen: a novel motif for trimer and higher order multimer formation without a triple helix. ***J Biol Chem*** 274:22409-22413, 1999. PMID: 10428813
- Wu, Q., and Chen, Q.: Mechanoregulation of chondrocyte proliferation, maturation, and hypertrophy: ion-channel dependent transduction of matrix deformation signals. ***Exp Cell Res*** 256:383-391, 2000. PMID: 10772811
- You, J., Yellowley, C.E., Donahue, H. J., Zhang, Y., and Chen, Q., and Jacobs, C. R.: Substrate deformation levels associated with routine physical activity are less stimulatory to bone cells relative to loading-induced oscillatory fluid flow. ***J Biomechan Engin*** 122: 387-393, 2000. PMID: 11036562
- Zhang, Y., and Chen, Q.: Changes of matrilin forms during endochondral ossification: molecular basis of oligomeric assembly, ***J Biol Chem*** 275(42):32628-32634, 2000. PMID: 10930403
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- You, J., Reilly, G., Zhen, X., Yellowley, C. E., Chen, Q., Donahue, H. J., and Jacobs, C. R.: Osteopontin gene regulation by oscillatory fluid flow via intracellular calcium mobilization and activation of mitogen-activated protein kinase in MC3T3-E1 osteoblasts. ***J Biol Chem*** 276(16):13365-13371, 2001. PMID: 11278573
- Wu, Q., Zhang, Y., and Chen, Q. Indian hedgehog is an essential component of mechanotransduction complex to stimulate chondrocyte proliferation. ***J Biol Chem*** 276(38):35290-35296, 2001. PMID: 11466306

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- Chen, Q. Regulation of cartilage maturation: intracellular pathways and extracellular modulators. ***Current Opinions in Orthopaedics***, 13: 329-332, 2002.
- Kanbe, K., Takagishi, K., and Chen, Q. Reply to study of SDF-1 alpha synovial fluid in early rheumatoid arthritis. ***Arthritis & Rheumatism***, 48:275-276, 2003.
- Mosher, J. T., Chen, Q., and Smith, M. B.: 1H magnetic resonance spectroscopy of nanomelic chicken cartilage: effect of aggrecan depletion on cartilage T2. ***Osteoarthritis and Cartilage***, 11(10): 709-715, 2003, PMID: 13129689
- Kanbe, K., Takemura, K., Takeuchi, K., Chen, Q., Takagishi, K., and Inoue, K. Synovectomy reduces stromal cell-derived factor-1 (SDF-1), which is involved in cartilage destruction in osteoarthritis and rheumatoid arthritis. ***Journal of Bone and Joint Surgery (Britain)***, 86:296-300, 2004. PMID: 15046450
- Chen, Q.: Mechanisms underlying mechanical regulation of cartilage growth. ***Current Opinions in Orthopaedics***, 14:307-310, 2003
- Phornphutkul, C., Wu, K., Yang, X., Chen, Q., and Gruppuso, P. IGF-I Signaling is Modified During Chondrocyte Differentiation, ***J. Endocrinology***, 183: 477-486, 2004 PMID: 15590974
- Lee, C-H, Huang, G-S, Chao, K-H, Wu, S-S., and Chen, Q. Differential Pretensions of a Flexor Tendon Graft for Anterior Cruciate Ligament Reconstruction: A Biomechanical Comparison, Arthroscopy. ***The Journal of Arthroscopic and Related Surgery***, 21:540-546, 2005 PMID: 15891718
- Chen, Q. Skeletal Mechanobiology: Where does it go in the 'post-dinosaur' age? ***Current Opinion in Orthopaedics***, 16: 309-310, 2005.
- Wei, L., Sun, X., Wang, Z., and Chen, Q. CD95-induced osteoarthritic chondrocyte apoptosis and necrosis: dependency on p38 mitogen-activated protein kinase, ***Arthritis Research & Therapy***, 8(2):R37, 2006 PMID: 16469115 / PMCID: PMC1526592
- Kanbe, K., Inoue, K., Xiang, C., and Chen, Q. Identification of clock as mechanosensitive gene by large-scale DNA microarray analysis: downregulation is osteoarthritic cartilage, ***Modern Rheumatology***, 16(3): 131-136, 2006 PMID: 16767550
- Wei, L., Sun, X., Wang, Z., Kanbe, K., Terek, R., and Chen, Q. Chondrocyte death induced by pathological concentration of chemokine stromal cell-derived factor-1, ***Journal of Rheumatology***, 33(9): 1818-1826, 2006 PMID: 16960943
- Yang, Z., Vezeridis, P.S., Nicholas, B., Crisco, J.J., Moore, D.C., and Chen, Q. Differential expression of type X collagen in a mechanically active 3-D chondrocyte culture system: a quantitative study, ***Journal of Orthopaedic Surgery and Research***, 1:15, 2006, PMID: 17150098 / PMCID: PMC1764003
- van der Weyden, L., Wei, L, Luo, J., Yang, X., Birk, D. E., Adams, D. J., Bradley, A., and Chen, Q. Functional knockout of the matrilin-3 gene causes premature chondrocyte maturation to hypertrophy and increases bone mineral density and osteoarthritis, ***American Journal of Pathology***, 169(2): 515-527, 2006 (Cover article) PMID: 16877353 / PMCID: PMC1698783
- Vezeridis, P.S., Semeins C.M., Chen, Q., and Klein-Nulend J. Osteocytes subjected to pulsating fluid flow regulate osteoblast proliferation and differentiation, ***Biochemical and Biophysical Research Communications***, 348(3):1082-8, 2006. PMID: 16904067
- Lee, M., Bier, A., Nickish, F., Ebersson, C., Ehrlich, M. G., and Chen, Q. Epiphysiodesis with infusion of stromal cell-derived factor-1 in rabbit growth plates, ***Journal of Bone and Joint Surgery***, 89:102-133, 2007. PMID: 17200317
- Kanbe, K., Yang, X., Wei, L., Sun, C., and Chen, Q. Pericellular matrilins regulate activation of chondrocytes by cyclic load-induced matrix deformation, ***Journal of Bone and Mineral Research***, 22:318-328, 2007 (Cover citation). PMID: 17129169

- Phornphutkul, C., Wu, K., Auyeung, V., Chen, Q., and Gruppuso, P., mTOR signaling contributes to chondrocyte differentiation, ***Developmental Dynamics***, 237(3):702-12, 2008. PMID: 18265001 / PMCID: PMC2768549
- Pei, M., Lou, J., and Chen, Q. Enhance and maintain chondrogenesis of synovial fibroblasts by cartilage extracellular matrix protein matrilins, ***Osteoarthritis and Cartilage***, 16:1110-1117, 2008. PMID: 18282772 / PMCID: 2596998
- Zhang, Y., Wang, Z., Luo, J., Kanbe, K., and Chen, Q. Multiple functions of the von Willebrand Factor A domain in matrilins: secretion, assembly, and proteolysis, ***Journal of Orthopaedic Surgery and Research***, 3:21, 2008. PMID: 18518980 / PMCID: PMC2427018
- Namdari, S., Wei, L., Moore, D., and Chen, Q., Reduced limb length and worsened osteoarthritis in adult mice by genetic inhibition of p38 MAP kinase activity in cartilage, ***Arthritis & Rheumatism***, 58(11): 3520-3529, 2008. PMID: 18975318 / PMCID: 2774253
- Phornphutkul C, Lee M., Voigt C, Ehrlich MG, Gruppuso P, Chen Q. The effect of rapamycin on bone growth in rabbits, ***Journal of Orthopaedic Research***, 27(9):1157-1161, 2009. PMID: 19382193 / PMCID: PMC2894807
- Kanbe K, Inoue K, Inoue Y, Chen Q. Inducement of mitogen-activated protein kinases in frozen shoulders. ***Journal of Orthopaedic Science***. 14(1):56-61, 2009. PMID: 19214689 / PMCID: PMC2893737
- Kim, M. S., Wu, K., Auyeung, V., Chen, Q., Gruppuso, P, and Phornphutkul, C., Leucine Restriction Inhibits chondrocyte proliferation and differentiation through mechanisms both dependent and independent of mTOR signaling, ***American Journal of Physiology-Endocrinology and Metabolism***, 296(6): E1374-82, 2009 PMID: 19401455 / PMCID: PMC2692404
- Chang, J-H, Shen, H-C, Huang, G-S, ...Chen, Q. et al, A Biomechanical comparison of all-inside meniscus repair techniques. ***Journal of Surgical Research***, 155(1): 82-88, 2009 PMID: 19328497 / PMCID: PMC2896296
- Sun, X.J., Wei, L., Chen, Q., and Terek, R. M, HDAC4 represses vascular endothelial growth factor expression in chondrosarcoma by modulating Runx2 activity. ***Journal of Biological Chemistry***, 284(33): 21881-90, 2009 PMID: 19509597 / PMCID: PMC2755912
- Sun X, Wei L, Chen Q., and Terek RM. CXCR4/SDF1 mediate hypoxia induced chondrosarcoma cell invasion through ERK signaling and increased MMP1 expression. ***Molecular Cancer*** 9:17, 2010. PMID: 20102637 / PMCID: PMC2825244
- Wei L, Fleming BF, Sun XJ, Teeple E, Wu W, Jay GD, Elsaid KA, Luo J, Machan JT, and Chen Q. Comparison of differential biomarkers of osteoarthritis with and without posttraumatic injury in the Hartley guinea pig model. ***Journal of Orthopaedic Research*** 28:900-6, 2010. PMID: 20108346 / PMCID: PMC2875364
- Wei L, Kanbe K, Lee M, Wei X, Pei M, Sun X, Terek R, and Chen Q. Stimulation of chondrocyte hypertrophy by chemokine stromal cell-derived factor 1 in the chondro-osseous junction during endochondral bone formation. ***Developmental Biology*** 341:236-45, 2010. PMID: 20206617 / PMCID: PMC2862458
- Guan YJ, Yang X, Wei L, and Chen Q. MiR-365: A Mechano-sensitive MicroRNA Stimulates Chondrocyte Differentiation through Targeting Histone Deacetylase 4. ***FASEB Journal***, 25(12):4457-66. Epub 2011 Aug 19, 2011, doi:10.1096/fj.11-185132 PMID:21856783 / PMCID: PMC3236620
- Kanbe K, Chen Q., Nakamura A, and Hobo K. Inhibition of MAP kinase in synovium by treatment with tocilizumab in rheumatoid arthritis. ***Clin Rheumatol***. 2011 Nov;30(11):1407-13. Epub 2011 Sep 10, PMID:21909699
- Sun X, Charbonneau C, Wei L, Yang W, Chen Q., and Terek R.M. CXCR4 targeted therapy inhibits VEGF expression and chondrosarcoma angiogenesis and metastasis, ***Molec. Cancer Ther.***, 2013, 12(7):1163-70. PMID: 23686836 / PMCID:PMC3707941

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- Guan Y, Chen Q, Yang X, Haines P, Pei M, Terek R, Wei X, Zhao T, and Wei L. Subcellular Relocation of Histone Deacetylase 4 Regulates Growth Plate Chondrocyte Differentiation through Ca²⁺/Calmodulin-Dependent Kinase IV. **American Journal of Physiology-Cell Physiology**, 2012;303(1):C33-40. PMID: 22442139 / PMCID: PMC3404523
- Wei F, Zhou J, Wei X, Zhang J, Fleming BF, Terek R, Pei M, Chen Q, Liu T, and Wei L. Activation of Indian Hedgehog Promotes Chondrocyte Hypertrophy and Upregulation of MMP-13 in Human Osteoarthritic Cartilage, **Osteoarthritis & Cartilage**, 2012; 20(7):755-63. PMID: 22469853 / PMCID: PMC3374008
- Li J, Huang J, Dai L, Yu D, Chen Q, Zhang X, and Dai K. MiR-146a: An IL-1beta Responsive MicroRNA Induces VEGF and Chondrocyte Apoptosis by Targeting Smad4, **Arthritis Research & Therapy**, 2012 14(2):R75. PMID:22507670 / PMCID: PMC3446449
- Desai HV, Voruganti IS, Jayasuriya C, Chen Q, and Darling EM. Live-cell, temporal gene expression analysis of osteogenic differentiation in adipose-derived stem cells, **Tissue Engineering Part A**, 2013 Jan;19(1-2):40-8. PMID:22840182 / PMCID: PMC3530940
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- Yang W, Wang J, Moore DC, Liang H, Dooner M, Wu Q, Terek RM, Chen Q, Ehrlich MG, Quesenberry PJ, and Neel BG. *Ptpn11* deletion in a novel progenitor causes metachondromatosis by inducing hedgehog signaling. **Nature** 2013 Jul 25;499(7459):491-5. PMID:23863940 / PMCID: PMC4148013
- Wei F, Moore DC, Wei L, Li Y, Zhang G, Wei X, Lee JK, and Chen Q. Correction Attenuation of osteoarthritis via blockade of the SDF-1/CXCR4 signaling pathway. **Arthritis Res Ther**. 2013 Jul 26;15(4):410. [Epub ahead of print] PMID: 23890186
- Sun X, Wei L, Charbonneau C, Chen Q, and Terek R.M. CXCR4 Targeted Therapy Inhibits VEGF Expression and Chondrosarcoma Angiogenesis and Metastasis. **Molecular Cancer Therapeutics**, 2013, 12(7):1163-70. PMID: 23686836 / PMCID:PMC3707941
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56. Namdari S, Moore DC, Wei L, Chen Q. Chronic cartilage-specific reduction of P38 map kinase activity in transgenic mice worsens osteoarthritis, *Orthopaedic Research Society Transactions*, Vol.32, Paper No: 000130
57. Yang X, Macri V, Vezeridis PS, Crisco JJ, Moore DC, Chen Q. The role of tension, compression, and fluid flow in the activation of mechanosensitive gene expression: Design of a novel 3D chondrocyte culture system, *Orthopaedic Research Society Transactions*, Vol.32, Poster No: 0411

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59. Wang Z, Yan B, Chen Q. DEC1 AND DEC2 ACTIVATION OF HYPERTROPHIC CHONDROCYTE MARKER TYPE X COLLAGEN GENE EXPRESSION REQUIRES DNA BINDING SITES OF ANOTHER TRANSCRIPTION FACTOR SP1, *54th Annual Meeting of the Orthopaedic Research Society*, San Francisco, CA March 2-5, 2008.
60. Wei L, Fleming B, Sun X, Teeple E, Wu W, Jay G, Elsaid K, Luo J, Chen Q. A COMPARISON OF DIFFERENTIAL BIOMARKERS OF OSTEOARTHRITIS WITH AND WITHOUT POST-TRAUMATIC IN THE HARTLEY GUINEA PIG MODEL. *54th Annual Meeting of the Orthopaedic Research Society*, San Francisco, CA March 2-5, 2008.
61. Yang X, Cheung E, Chen Q. RAPID ACTIVATION OF BMP SIGNALING PATHWAY DURING MECHANICAL ADAPTATION OF CHONDROCYTE HYPERTROPHY. *54th Annual Meeting of the Orthopaedic Research Society*, San Francisco, CA March 2-5, 2008.
62. Sun C, Moore DC, Machan JT, Van der Weydan L, Bradley A, Chen Q. Absence of Matrilin-3 gene that leads to osteoarthritis alters trabecular morphology. *54th Annual Meeting of the Orthopaedic Research Society*, March 2-5, 2008
63. Deren M, Yang X, Chen Q. Chemical Removal of Primary Cilium from Hypertrophic Chondrocyte Surface Reduces but Does Not Eliminate Mechanical Stimulation of Hypertrophic Chondrocyte Marker Type X Collagen mRNA, Paper No. 37 55th Annual Meeting of the Orthopaedic Research Society, February 22-25, 2009, Las Vegas, NV.
64. Haines P, Wang Z, Chen Q. Chondrodysplasia Causing Mutations in Matrilin-3 Lead to Novel Phenotypes in Stably Expressing ATDC5 Chondroprogenitor Cells, Paper No. 278, 55th Annual Meeting of the Orthopaedic Research Society, February 22-25, 2009, Las Vegas, NV.
65. Terek R, Wei L, Chen Q, Sun X. MMP-1 Expression is Regulated by CXCR4/SDF-1 in Chondrosarcoma Cells, Paper No. 251, 55th Annual Meeting of the Orthopaedic Research Society, February 22-25, 2009, Las Vegas, NV.
66. Trehan S, Chen Q. Matrilin-3, a Regulator of Chondrocyte Hypertrophy, Bone Mineral Density, and Osteoarthritis, Binds Bone Morphogenetic Protein-2, Vascular Endothelial Growth Factor165 and Insulin-like Growth Factor, Poster No. 427, 55th Annual Meeting of the Orthopaedic Research Society, February 22-25, 2009, Las Vegas, NV.
67. Yang W, Sun C, Wang Z, Valdez M, Wu Q, Chen D, Chen Q, Ehrlich M, Terek R, Moore D. IGF1-evoked Chondrocyte Differentiation Requires Protein Tyrosine Phosphatase Shp2, Poster No. 608, 55th Annual Meeting of the Orthopaedic Research Society, February 22-25, 2009, Las Vegas, NV.
68. Wang Z, Luo J, Chen Q. Matrilin-3 mutations causing osteochondrodysplasia inhibit Collagen X promoter activities through modulating Bone Morphogenetic Protein signaling pathway, Poster No. 945, 55th Annual Meeting of the Orthopaedic Research Society, February 22-25, 2009, Las Vegas, NV.
69. Yang X, Deren M, Chen Q. Insulin Increases Alpha-Tubulin Gene Expression and Its Distribution in Cilia and Decreases the Extent of Mechanical Stimulation of Chondrocyte Hypertrophy, Poster No. 951, 55th Annual Meeting of the Orthopaedic Research Society, February 22-25, 2009, Las Vegas, NV.
70. Yang W, Moore D, Zhao K, Valdes M, Kato S, Wu Q, Quesenberry P, Chen Q, Ehrlich M. Osteoclast Development and Skeletal Remodeling Requires PTPase Shp2. Poster presented at the 56th annual Orthopaedic Research Society meeting, March 6-9, 2010; New Orleans, LA.
71. Wei L, Terek RM, Wei X, Chen Q. Stimulation of Chondrocyte Hypertrophy by Chemokine Stromal Cell-Derived Factor 1 in the Chondro-osseous Junction through a Positive

- Feedback Loop Mediated by Runx2. Present at the ORS 56th Annual Meeting, March 6-9, 2010 in New Orleans, Louisiana.
72. Blaine T, Cote M, Ortega S, Lee F, Bigliani L, Chen Q. CXCR4 blockade (AMD 3100 and T140 analog) inhibits SDF-1 expression and cell migration in human subacromial bursa cells. Poster presented at the 56th annual Orthopaedic Research Society meeting, March 6-9, 2010; New Orleans, LA.
 73. Chen Q. SHP2 inhibits mechanical activation of chondrocyte differentiation, International Conference on Bone and Cartilage Research, November 9, 2009, Taipei, Taiwan.
 74. Jayasuriya C, Chen Q, Zhou F. Chondroprotective Extracellular Matrix Protein Matrilin-3 Specifically Binds Catabolic Inflammatory Cytokines and Chemokine in vitro. Poster presented at the 56th annual Orthopaedic Research Society meeting, March 6-9, 2010; New Orleans, LA.
 75. Wu W, Wei F, Jay G, Elsaid K, Chen Q, Wei L. Assessing the Role of Synovial Inflammation, SDF-1, IL-1-Beta, TNF-alpha, and Lubricin in the Pathogenesis of Morphologically Similar Natural and Post-traumatic Hartley Guinea Pig OA Models. Poster presented at the 56th annual Orthopaedic Research Society meeting, March 6-9, 2010; New Orleans, LA.
 76. Yang X, Yang W, Wu KY, Guan Y, Haines P, Phornphutkul C, Chen Q. Deficiency of tyrosine Phosphates SHP2 Sensitizes Mechanical Stimulation of chondrogenesis through Activation of mTOR. Poster presented at the 56th annual Orthopaedic Research Society meeting, March 6-9, 2010; New Orleans, LA.
 77. Wei L, Wei F, Zhou J, Wei X, Terek RM, Chen Q. Activation of Indian Hedgehog Promotes Chondrocyte Hypertrophy and Upregulation of MMP-13 in Osteoarthritic Cartilage. Present at the ORS 56th Annual Meeting, March 6-9, 2010 in New Orleans, Louisiana. Podium.
 78. Wei L, Wei F, Zhou J, Wei X, Wu W, Chen Q. Activation of Indian Hedgehog Promotes Chondrocyte Hypertrophy and Upregulation of MMP-13 in Osteoarthritic Cartilage. Poster presented at the 56th annual Orthopaedic Research Society meeting, March 6-9, 2010; New Orleans, LA.
 79. Trehan S, Chen Q. Matrilin-3, which Associates with Chondrodysplasia and Osteoarthritis, Binds Vascular Endothelial Growth Factor 165 and Inhibits endothelial Cell Proliferation. Poster presented at the 56th annual Orthopaedic Research Society meeting, March 6-9, 2010; New Orleans, LA.
 80. Sun X, Wei L, Chen Q, Terek RM. CXCR4/SDF-1 Promote Angiogenesis in Chondrosarcoma. Present at the ORS 56th Annual Meeting, March 6-9, 2010 in New Orleans, Louisiana.
 81. Zhou F, Pei M, Luo J, Chen Q. Matrilin-3 Binds to TGF-beta and Enhance Chondrogenesis Induced by TGF-beta. Poster presented at the 56th annual Orthopaedic Research Society meeting, March 6-9, 2010; New Orleans, LA.
 82. Wei L, Kanbe K, Wei X, Sun X, Terek R, Chen Q. Stimulation of Chondrocyte Hypertrophy by Chemokine Stromal Cell-Derived Factor 1 in the Chondro-osseous Junction through a Positive Feedback Loop Mediated by Runx2. Poster presented at the 56th annual Orthopaedic Research Society meeting, March 6-9, 2010; New Orleans, LA.
 83. Yang X, Guan Y, Deren M. "Cyclic Loading Activates mTOR Signaling Pathways, Which is Essential for Mechanical Stimulation of Indian Hedgehog Gene Expression in Chondrocytes" *Journal Of Orthopaedic Research Transactions* Vol. 36, Long Beach, CA, 2011
 84. Yang W, Chan G, Wang J, Takeshita C, Tauton J, Wu Q, Chen Q, Ehrlich M, Neel B, Iorio C. "Shp2 via Erk/Rsk2-Mediated Negative Feedback Signaling Regulated M-CSF- Evoked PI3 Kinase/Akt Activation in Osteoclast Precursors" *Journal Of Orthopaedic Research Transactions* Vol. 36, Long Beach, CA, 2011

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86. Zhou F, Wang ZK, Haines P, Chen Q. "TGF-beta1 can Rescue the Lost in Chondrogenic Function of ATDC5 Chondroprogenitor Cells Expressing SEMD and Hand Osteoarthritis Point Mutations in Matrilin-3" *Journal Of Orthopaedic Research Transactions* Vol. 36, Long Beach, CA, 2011
87. Wei F, Moore D, We X, Li K, Li Y, Chen Q, Wei L. Session Title: "Blockage of SDF-1 Binding to CXCR4 Attenuates OA Severity in Human Cartilage Explants and the Duncan-Hartly Guinea Pig Model of Primary Osteoarthritis" *Journal Of Orthopaedic Research Transactions* Vol. 36, Long Beach, CA, 2011
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89. Guan Y, Chen Y, Webster T, Chen Q. Self-Assembled Rosette Nanotubes Enables Delivery of Small Interfering RNA That Knocks Down Histone Deacetylase 4 in Chondrocytes *Journal Of Orthopaedic Research Transactions* Vol. 36, Long Beach, CA, 2011
90. Deren M, Yang X, Guan Y, Chen Q. "Removal of Primary Cilium from Chondrocyte Surface Reduces but does not Abolish Mechanical Stimulation of Mechanosensitive Chondrocyte Markers Type X and Type II Collagen mRNA" *Journal Of Orthopaedic Research Transactions* Vol. 36, Long Beach, CA, 2011
91. Jayasuriya C, Goldring M, Chen Q. "Matrilin-3 Is Required for Maintaining Type II Collagen and Aggrecan Synthesis while Inhibiting Expression of Osteoarthritis Associated Matrix Proteases Induced by IL-1?" *Journal Of Orthopaedic Research Transactions* Vol. 36, Long Beach, CA, 2011
92. Li X, Moore D, Zhou F, Robbins A, Gao Z, Chen Q. "Deficiency of Cartilage-Specific Gene Matrilin-1 Increases Angiogenesis and Bone Formation During Fracture Healing As Revealed by In Vivo Imaging and Micro-CT analysis" *Journal Of Orthopaedic Research Transactions* Vol. 36, Long Beach, CA, 2011
93. Yang K, Chen Q. "Inhibition of MicroRNA-365 Induces Senescence of Primary Chondrocytes but Not Chondrosarcoma Cells" *Journal Of Orthopaedic Research Transactions* Vol. 36, Long Beach, CA, 2011
94. Deren M, Yang X, Guan Y, Chen Q. "Removal of Primary Cilium from Chondrocyte Surface Reduces but does not Abolish Mechanical Stimulation of Mechanosensitive Chondrocyte Markers Types X and Types II Collagen mRNA " *Journal Of Orthopaedic Research Transactions* Vol. 36, Long Beach, CA, 2011
95. Jayasuriya C, Goldring M, Chen Q. Matrilin-3 is required for maintaining type II collagen and aggrecan synthesis while inhibiting expression of osteoarthritis associated matrix proteases induced by IL-1b, *Extracellular Matrix in Health and Disease*, Boston, MA, 2011
96. Yupeng Chen; Kevin Koopman; Chathuraka Jayasuriya; Jack Cossman; Thomas Webster; Hicham Fenniri; Qian Chen, Development of Novel Chondroprotective Matrilin-3 Hybrid Nanotubes that Enhance Chondrocyte Adhesion, Increase Matrix Synthesis, and Reduce Catabolic Gene Expression, POSTER #: 1623, 58th annual Orthopaedic Research Society meeting, San Francisco, 2012.
97. Lei Wei; Xiaochun Wei; Yuzhi Wei; Xiaowei Wang; Braden Fleming; Richard Terek; Qian Chen; A-2-Macroglobulin Inhibits Inflammatory Cytokines and MMPs in Osteoarthritis, POSTER #: 1703, 58th annual Orthopaedic Research Society meeting, San Francisco, 2012.
98. Edward Cheung; Xu Yang; Qian Chen, "Rest Period after Cyclic Loading Enhances Mechanical Stimulation of Osteogenic Factors Bone Morphogenetic Protein 2 and Type X

- Collagen Gene Expression in Chondrocytes" POSTER #: 1807, 58th annual Orthopaedic Research Society meeting, San Francisco, 2012.
99. Jack Cossman; Xin Li; Eric Darling; Yupeng Chen; Yingjie Guan; Qian Chen, "Matrilin-1 Deficiency Weakens Cartilage Matrix and Predisposes Mouse Knee to Osteoarthritis after Destabilization" PAPER #: 0017, 58th annual Orthopaedic Research Society meeting, San Francisco, 2012.
 100. Kun Yang; Qian Chen; Zuoshang Xu; Chunxing Yang, Mechano-responsive microRNA-365 affects post-natal skeletal development in vivo , PAPER #: 0168, 58th annual Orthopaedic Research Society meeting, San Francisco, 2012.
 101. Chathuraka Jayasuriya; Qian Chen; Regulation of Cartilage Homeostasis Genes by Matrilin-3: Dependency on Interleukin-1 Receptor Antagonist , PAPER #: 0339 (NIRA Winner), 58th annual Orthopaedic Research Society meeting, San Francisco, 2012.
 102. Yupeng Chen; Tianbin Zhou; Jorge Rosario; Hongchuan Yu; Eric Darling; Thomas Webster; Hicham Fenniri; Qian Chen, "In vitro and in vivo intracellular delivery of siRNA via self-assembled nanopieces for orthopaedic therapeutics and diagnostics " Paper #: 0400, 59th annual Orthopaedic Research Society meeting, San Antonio, TX, 2013. (Grand Prize NIRA winner)
 103. Yingjie Guan; Qian Chen, " Mechanical Regulation of mTOR Pathway is Required for Cartilage Development" Paper #: 0087, 59th annual Orthopaedic Research Society meeting, San Antonio, TX, 2013.
 104. Chathuraka Jayasuriya; Zhengke Wang; Qian Chen, "Osteoarthritis associated mutation in MATN3 gene abolishes IL-1Ra dependent stimulation of chondrogenesis markers in chondroprogenitor cells" 59th annual Orthopaedic Research Society meeting, San Antonio, TX, 2013.
 105. Kun Yang; Alex Han; Qian Chen, "Cartilage-specific expression of mechanically inducible miRNA-365 leads to accelerated formation of the secondary ossification center and higher bone mineral density of long bones in vivo" Paper #: 0118, 59th annual Orthopaedic Research Society meeting, San Antonio, TX, 2013.
 106. Aaron Mohan - Wentian Yang; Douglas Moore; Qian Chen; Qian Wu; Richard Terek; Benjamin Neel; Peter Quesenberry; Michael Ehrlich; "Cartilage-Specific Tumor Suppression by Ptpn11 As Revealed by Tissue Specific Shp2 deficient Mice ", Paper # 0122, 59th annual Orthopaedic Research Society meeting, San Antonio, TX, 2013.
 107. Jingming Zhou; Yuzhi Wei; Xiaochun Wei; Shaowei Wang; Ge Zhang; Qian Chen; Richard Terek; Lei Wei, "Disrupting Ihh signaling pathway in vivo attenuates OA progression in Col2a1-CreERT2; Ihhf1/fl mouse induced by surgery, Paper # 0399, 59th annual Orthopaedic Research Society meeting, San Antonio, TX, 2013.
 108. Yun Gao; Zhiyu Huang; Nan Hu; Pengcheng Liu; Jing Ding; Meng Feng; Kun Yang; Qiling Yuan; Xiaqing Jiang; Cherie Charbonneau; Marco De Cecco; Richard Terek; John Froehlich; Joen M. Sedivy; Qian Chen, Repressing Microrna-dependent Retrotransposon Line-1 For Osteoarthritis Treatment, NIRA Finalist at the ORS 2020 Annual Meeting at the Phoenix Convention Center in Phoenix, Arizona, February 8-11.
 109. Brandon Vorrius; Neill Li; Julie Katarincic; Qian Chen, Promote Schwann Cell Migration In Collagen Conduit With 3d Porous Chemotactic Scaffold Of Matrilin-2 And Chitosan For Hand Nerve Repair, PODIUM presentation at the ORS 2020 Annual Meeting, Phoenix, Arizona, February 8-11.
 110. John N. Twomey-Kozak; Salomi Desai; Wenguang Liu; Neill Li; Nick Lemme; Qian Chen; Brett Owens; Chathuraka Jayasuriya, DLX5 Is A Therapeutic Target For Attenuating Hypertrophy And Apoptosis In Mesenchymal Progenitor Cells, PODIUM presentation in the Spotlight Session at the ORS 2020 Annual Meeting, Phoenix, Arizona, February 8-11.

111. Jacob Keith Richards Jamison; Yun Gao; Qian Chen, Effect Of Nucleoside Reverse Transcriptase Inhibitors (NRTIs) On Bone Structure In Young Adult And Aged Mice, POSTER presentation at the ORS 2020 Annual Meeting, Phoenix, Arizona, February 8-11.

INVITED PRESENTATIONS (Updated until 2011)

1. "Domains of type X collagen: alteration of cartilage matrix by fibril assembly and proteoglycan association", Fifth International Conference on Cell-Mediated Calcification and Matrix Vesicles, Hilton Head, SC, February 18, 1991 (Speaker).
2. "A monoclonal antibody that detects crosslinking of type II collagen: characterization and use in analysis of normal and abnormal development", 1992 East Coast Connective Tissue Society Twelfth Annual Meeting, Boston, MA, March 21, 1992 (Speaker).
3. "Domains of type X collagen: alteration of cartilage matrix by fibril association and proteoglycan accumulation", Northeast Regional Developmental Biology Conference, Woods Hole, MA, November 14, 1992 (Speaker).
4. "Cartilage matrix protein forms type II collagen independent filaments: analysis with a retrovirus expression system", East Coast Connective Tissue Society Fifteenth Annual Meeting, Piscataway, NJ, March 21, 1992 (Speaker).
5. "Alteration of chondrocyte differentiation and skeletal growth by extracellular environment in cartilage", Arthritis Foundation Research Conference, Chicago, IL, August 12, 1995 (Speaker).
6. "Assembly of type II collagen-independent filaments from cartilage matrix protein", Gordon Research Conferences on Collagen, New London, NH, July 19, 1995 (Speaker).
7. "The roles of extracellular matrix molecules during skeletal development", Department of Biochemistry, Rush Presbyterian St. Luke's Medical Center, Chicago, IL, August 14, 1995 (Invited Speaker).
8. "The roles of extracellular matrix molecules in cartilage development", Department of Biochemistry, University of Hong Kong, Hong Kong, China, October 3, 1995 (Invited Speaker).
9. "The functions of extracellular matrix molecules in cartilage", Department of Biochemistry, Fudan University, Shanghai, China, November 20, 1995 (Invited Speaker).
10. "Molecular basis of extracellular matrix assembly in cartilage", Department of Physiology, The Pennsylvania State University, College of Medicine, Hershey, PA, March 19, 1996 (Speaker).
11. "Mechanism of extracellular matrix assembly in cartilage", James Buchanan Lectures, Department of Orthopaedics and Rehabilitation, The Pennsylvania State University, College of Medicine, Hershey, PA, March 29, 1996 (Speaker).
12. "Assembly of cartilage matrix protein", Department of Anatomy and Cellular Biology, Tufts University School of Medicine, Boston, MA, July 26, 1996 (Invited Speaker).
13. "Assembly of cartilage matrix protein filamentous networks: requirement of a coiled-coil and MIDAS interactions", The Fourth Pan Pacific Connective Tissue Society Meeting, Kona, HI, December 2, 1996 (Speaker).
14. "Genetic basis of osteoarthritis", *James Buchanan Lecture*, Department of Orthopaedics and Rehabilitation, The Pennsylvania State University, College of Medicine, Hershey, PA, March 28, 1997 (Speaker).
15. "Cartilage matrix protein filament formation", Gordon Research Conference on Collagen, New London, NH, July 22, 1997 (Speaker).
16. "Gene expression and molecular assembly of extracellular matrix proteins in cartilage", Department of Anatomy and Histology, University of Pennsylvania School of Dental Medicine, Philadelphia, PA, October 14, 1997 (Invited Speaker).

17. "Mechanisms of osteoarthritis", *Arthritis Day*, Arthritis Foundation Central Pennsylvania Chapter, Hershey, PA, November 15, 1997 (Invited Speaker).
18. "Chondrocyte differentiation and aging", Graduate Program of Cell and Molecular Biology, The Pennsylvania State University College of Medicine, Hershey, PA, April 7, 1998 (Speaker).
19. "Molecular analysis of cartilage matrix", 1998 Department of Orthopaedics, Karolinska Hospital, Stockholm, Sweden, May 14, 1998 (Invited Speaker).
20. "Regulation of chondrocyte differentiation by PTH is through p38 MAP kinase pathway", Fall Symposium of American Society for Biochemistry and Molecular Biology, Taos, NM, November 6, 1998 (Speaker).
21. "ERK and p38 MAP kinase are required for stimulation of chondrocyte proliferation", Annual Meeting of Orthopaedic Research Society, Anaheim, CA, March 2, 1999 (Speaker).
22. "Signal transduction pathways regulating chondrocyte proliferation and differentiation", VA Medical Center, Seattle, WA, August 2, 1999 (Invited Speaker).
23. "Matrilins: molecular assembly of a novel cartilage matrix network", Department of Orthopaedics, University of Washington, Seattle, WA, August 4, 1999 (Invited Speaker).
24. "Molecular assembly of an extracellular matrix network in cartilage", Department of Oral Cell Biology, ACTA, Free University, Amsterdam, Holland, December 7, 1999 (Invited Speaker).
25. "Matrilins, hedgehogs, and regulation of chondrocyte differentiation", Department of Physiology, The Pennsylvania State University, College of Medicine, Hershey, PA, May 9, 2000 (Speaker).
26. "Molecular determinants of chondrocyte proliferation and differentiation", Department of Orthopaedic Surgery, Washington University, St. Louis, MI, July 20, 2000 (Invited Speaker).
27. "Regulation of chondrocyte differentiation by PTH-rP and indian hedgehog",
28. Department of Anatomy and Cellular Biology, Tufts University School of Medicine, Boston, MA, November 8, 2000 (Invited Speaker).
29. "Molecular regulation of chondrocyte differentiation", Department of Orthopaedics, Brown University School of Medicine, Providence, RI, November 13, 2000 (Invited Speaker)
30. "Matrilins: Novel Components of Mechanotransduction in Cartilage", Intergrative Science Biotransport Graduate Program, The Pennsylvania State University, University Park, PA
31. December 1, 2000 (Speaker)
32. "Molecular regulation of chondrocyte differentiation", Department of Cell and Molecular Biology, Brown University, Providence, RI, March, 1, 2001 (Invited Speaker)
33. "Pericellular Components of Mechanotransduction Pathway", Molecular Medicine Graduate Program, The Pennsylvania State University, University Park, PA, March 22, 2001 (Speaker)
34. "Control of the chondrocyte proliferation/hypertrophy switch by p38 mitogen activated protein kinase", First International Conference on the Growth Plate, San Antonio, TX, June 16, 2001 (Podium Presentation)
35. "Identification of a mechano-responsive region in the promoter of type X collagen gene", Annual Meeting of Orthopaedic Research Society, San Francisco, CA, March, 2001. (Podium Presentation)
36. "Stromal cell-derived factor-1 signaling: a novel mechanism of synovial induction of cartilage in rheumatoid arthritis and osteoarthritis", 6th World Congress of the Osteoarthritis Research Society International, Washington DC, September 30, 2001. (Podium Presentation)
37. "Molecular regulation of chondrocyte proliferation, differentiation, and death", The Annual Hinkle Society Junior Investigator Lecture, Hershey, PA, 2001 (Invited Speaker).

38. "PTHrP regulation of chondrocyte differentiation via p38 MAP kinase pathway", Department of Biochemistry, University of Pennsylvania School of Dental Medicine, Philadelphia, PA, October 1, 2001 (Invited Speaker).
39. "Regulation of chondrocyte differentiation by PTHrP via p38 MAPK pathway", Department of Surgery, The Pennsylvania State University, College of Medicine, Hershey, PA, October 7, 2001 (Speaker)
40. "Interaction of stromal cell-derived factor-1 and CXC chemokine receptor 4 stimulates matrix metalloprotease 3 from human chondrocytes", American College of Rheumatology Annual Scientific Meeting, San Francisco, November 10, 2001. (Podium Presentation)
41. "Regulation of endochondral ossification by p38 MAP kinase pathway" Annual Meeting of the American Society for Cell Biology, December 10, 2001. (Invited Speaker)
42. "Regulation of bone formation by PTHrP through p38 MAP kinase" Department of Pathology, University of Alabama at Birmingham, Birmingham, AL, January 23, 2002 (Invited Speaker)
43. "Mechanical transduction pathway in cartilage", Workshop of Japanese Society of Cartilage Metabolism, Gunma, Japan, March 21, 2002 (Invited Speaker)
44. "Mechanical regulation of cartilage gene expression", Annual Meeting of the Japanese Society of Cartilage Metabolism, Gunma, Japan, March 22, 2002 (Invited Speaker)
45. "Regulation of chondrocyte differentiation by p38 MAP kinase" Experimental Biology Meeting 2002, New Orleans, LA, April 26, 2002 (Podium Presentation)
46. "Mechanical regulation of chondrocyte proliferation by indian hedgehog" Gordon Research Conference in Musculoskeletal Biology and Engineering, Lebanon, NH, August 1, 2002 (Invited Speaker)
47. "P38 MAP kinase: essential roles in regulating cell differentiation and bone formation", Rhode Island Hospital Basic Research Seminar Series, Providence, RI, September 23, 2002 (Invited Speaker)
48. "Biomechanical regulation of cartilage" Department of Orthopaedics, Brown Medical School, Providence, RI, September 11, 2002 (Speaker)
49. "Matrilin filamentous networks: transducers of mechanical signals in cartilage" The First Meeting of the American Society for Matrix Biology, Houston, Tx, November 6, 2002 (Podium Presentation)
50. "Transduction of mechanical signals by matrilins" Experimental Biology Meeting 2003, San Diego, CA, April 1, 2003 (Invited Speaker)
51. "Biomechanical regulation of chondrocyte differentiation" Graduate Program in Pathobiology, Brown University, RI, April 3, 2003 (Speaker)
52. "Regulation of bone formation by p38 MAP kinase", National Defense University, Taipei, Taiwan, April 24, 2003 (Invited Speaker)
53. "Mechanical regulation of cartilage growth: molecular mechanisms", National Taiwan University, Taipei, Taiwan, April 25, 2003 (Invited Speaker)
54. "Molecular regulation of bone formation", Chang Gung University, Kaohsiung, Taiwan, April 27, 2003 (Invited Speaker)
55. "Extracellular matrix proteins in regulation of chondrocyte differentiation", Kaohsiung Medical University, Kaohsiung, Taiwan, April 27, 2003 (Invited Speaker)
56. "Extracellular matrix molecules and cartilage diseases" and "Mechanical regulation of chondrocyte differentiation" Cleveland Clinic, (Visiting Professor)
57. "Genetics of extracellular matrix and osteoarthritis", World Congress on Osteoarthritis, Boston, MA, (Invited Speaker)
58. "Mechanical Regulation of osteochondral progenitor cell lineage and differentiation" Gordon Conference on Cartilage Biology and Pathology, Luca, Italy, (Invited Speaker)
59. "Modulation of BMP signaling by extracellular matrix protein", Experimental Biology 2006, San Francisco, CA, (Invited Speaker)

60. "Molecular regulation of fracture healing", The Second International Conference on Osteoporosis, Chengdu, China, (Invited Speaker)
61. "Extracellular matrix in cartilage diseases", Annual Research Conference of Orthopaedics, Taipei, Taiwan, (Invited Speaker)
62. "Mechanical regulation of bone formation", Tri-Military General Hospital, Taipei, Taiwan, (Seminar Speaker)
63. "Molecular mechanisms distinguishing matrilin-3 mutations in chondrodysplasia and osteoarthritis", Annual Conference of Orthopaedic Research Society, Chicago, IL, (Podium Presentation)
64. "Regulation of chondrocyte hypertrophy and bone mineral density by matrilin-3 through modulating bone morphogenetic protein signaling pathways." American Society of Bone and Mineral Research 29th Annual Meeting, September 17th, Honolulu, Hawaii. (Podium Presentation)
65. "How to publish scientific papers in international bone journals" International Conference in Osteoporosis and Bone Research 2007, October 20th, Beijing, China, (Invited Speaker)
66. "Mechanical and Chemical Regulation of Cells in a 3D environment", Experimental Biology Meeting, April 1, 2008, San Diego, CA (Invited Speaker)
67. "Mechanotransduction in 3D: Implication for Tissue Engineering" Graduate Program of Cell Molecular and Developmental Biology seminar series, The Sackler Graduate School of Biomedical Sciences, Tufts University April 24, 2008, (Seminar Speaker)
68. "Mouse models and new therapeutic targets for OA", Sun Valley Workshop on Skeletal Biology, August 3, 2008, Sun Valley, ID (Invited Speaker)
69. "Mechanotransduction in tissue engineering and repair", COBRE in Tissue Engineering and Repair, Roger Williams Medical Center, October 1, 2008, Providence, RI (Seminar Speaker)
70. "Bone and cartilage damage in osteoarthritis", 2008 International Conference in Osteoporosis and Bone Research, October 20, 2008, Beijing, China (Invited Speaker)
71. "Activation of chondrocytes by cyclic deformation of extracellular matrix", Eastern Forum, October 28, 2008, Shanghai, China (Invited Speaker)
72. "Bone and cartilage damage in osteoarthritis", The Third Military Medical University, October 30, 2008, Shanghai, China (Invited Speaker)
73. "Cartilage Matrix Metabolism Associated with ADAMTS (Aggrecanase) and BMP Signaling Pathway", Japan College of Rheumatology, April 24, 2009, Tokyo, Japan (Invited Speaker)
74. "The multiple roles of extracellular matrix molecules in skeletal diseases", University of Rochester, September 22, 2009, Rochester, NY (Invited Speaker)
75. "New therapeutic targets for joint degeneration in animal models", 2009 IDeA Northeast COBRE regional meeting, August 5, 2009, Dartmouth College, NH (Podium Presentation)
76. "Anti-Chemokine Therapy for Treating Skeletal Diseases and Tumor", Annual Meeting of Sino-American Pharmaceutical Professional Association New England, December 11, 2010, Massachusetts Institute of Technology, Cambridge, MA (Invited Speaker)
77. "Rheumatoid and Osteoarthritis: The Role of Inflammation and Aging", International Conference in Osteoporosis and Bone Research 2010, October 29th, Shenzhen, China, (Plenary Speaker)
78. "Deficiency of Cartilage-Specific Gene Matrilin-1 Increases Angiogenesis and Bone Formation during Fracture Healing As Revealed by In Vivo Imaging and Micro-CT analysis" Imaging Workshop of the International Conference in Osteoporosis and Bone Research 2010, October 27th, Dongguan, China (Invited Speaker)
79. "Preclinical models of osteoarthritis" Animal Models Workshop of the International Conference in Osteoporosis and Bone Research 2010, October 28th, Shenzhen, China (Podium Presentation)

80. "Chemokines, Cytokines, and Their Modulation during Joint Degeneration" Annual Meeting of American College of Rheumatology 2010, November 6th, Atlanta (Invited Speaker)
81. "Accelerated Fracture Healing is Correlated with Angiogenesis in Matrilin-1 Knockout Mice" Extracellular Matrix in Health and Disease, April 14th, 2011, Boston (Podium Presentation)
82. "Nanomaterial and Small RNA in Cartilage Tissue Engineering" The fifth International Meeting of Orthopaedic Technology and Translational Medicine, June 18, 2011, Shanghai, China (Invited Speaker)
83. Accelerating Fracture Healing Correlates with Enhancing Angiogenesis and Mesenchymal Stem Cells in Matrilin-1 Knockout Mice" Northeast Regional IDEA Meeting, August 11, 2011, Newport, RI (Podium Presentation)
84. "Accelerating Fracture Healing Correlates with Enhancing Angiogenesis and Mesenchymal Stem Cells in Matrilin-1 Knockout Mice" Annual Meeting of the American Society of Bone and Mineral Research, September 19, 2011, San Diego, CA (Podium Presentation)

PATENTS

Thomas Webster, Qian Chen, Yupeng Chen,
"Nanotubes as Carriers of Nucleic Acids into Cells"
US Patent App. *US20140171482*, 2014

Qian Chen, Yupeng Chen, Hongchuan Yu, Michael Ehrlich
"Nanocarriers and Their Processing for Diagnostics and Therapeutics"
US Patent 9,775,842, 2017.

Qian Chen, Yupeng Chen, Hongchuan Yu,
"Nanomaterial Compositions, Synthesis, and Assembly"
US Patent App. *15/527,283*, 2017

Qian Chen, Chatsuraka Jayasuriya
"Compositions and Methods for the Treatment of Orthopedic Disease or Injury"
US Patent 10,130,687, 2018

GRANTS

More than \$30 million NIH funds as Principal Investigator (PI) in the past fifteen years.

Active

NIH/NIGMS, P30GM122732 (PI: Chen)
Center of Biomedical Research Excellence in Skeletal Health and Repair (Phase 3)
09/01/17-08/31/22
Role: PI

NIH/NIAMS, R01 AR072027 (PI: Chen)
Development of Intra-Cartilage Delivery Platform for RNA Therapeutics against Joint Diseases,
9/1/17-8/31/22
Role: Co-investigator

NIH/NIAMS, R61/R33 AR076807 (PI: Chen)
Repressing Retrotransposon LINE-1: New Concepts for Osteoarthritis Treatment

09/01/19-8/31/22

Role: PI

NIH/NIGMS, 3P30GM122732-05S1 (PI: Chen)

Developing Brain Theranostics of ADRD infiltrating the Blood-Brain Barrier

09/01/21-8/31/22

Role: PI

NIH/NCATS, R41TR002298 (PI: Chen)

Developing Nanopieces, a Platform RNAi Delivery Technology for Treatment of Multiple Diseases

02/21/20-02/20/22 (no cost extension)

Role: PI

NIH/NIAMS, R61AR076807-02S1 (PI: Chen)

Determining the Role of Retrotransposon Line-1 in Alzheimer's Disease

09/01/20-08/31/22 (no cost extension)

Role: PI

Past (since 2019)

NIH/NIGMS, 3P30GM122732-04S1 (PI: Chen)

Developing Brain Theranostics of ADRD infiltrating the Blood-Brain Barrier

Role: PI

NIH/NIGMS, P30GM122732-02S (PI: Chen)

Developing Novel Alzheimer's Disease RNA Therapeutics Crossing the Blood-Brain Barrier

09/01/19-08/31/21

Role: PI

NIH/NIGMS, P20GM104937 (PI: Chen)

Center of Biomedical Research Excellence in Skeletal Health and Repair (Phase 2),

09/15/12-8/31/19

Role: PI

NIH/NCI, R01CA166089-01A1 (PI: Terek)

Targeting CXCR4 and microRNA as Therapy

09/25/13-07/31/19

Role: Co-investigator

NIH/NIAMS, R01-AR066746-01A1 (PI: Yang)

ROLE OF PTPN11 IN CARTILAGE STEM CELLS AND TUMORIGENESIS

09/21/15-08/31/20

Role: Co-investigator

PEER REVIEWER FOR MEDICAL JOURNALS

Basic Science Section Editor, *Current Opinion in Orthopaedics*, 2002-2006.

Managing Editor, *Frontiers in Biomedical Science*, 2000-present.

Scientific Board, Intech-Open Access Publisher, 2011-present
 Editorial Board, *Aging Cell*, 2013-present
 Editorial Board, *Journal of Orthopaedic Surgery and Research*, 2008-present.
 Editorial Board, *Orthopaedic Research and Review*, 2009-present.
 Editorial Board, *Journal of Arthritis*, 2011-present.
 Editor, *Rheumatology: Current Research*, 2011-present.
 Editor, supplemental Edition, *Bone*, 2010.
 Editor, "Osteoarthritis/Book 2", ISBN: 978-953-308-610-1, 2011.
Developmental Dynamics, 1993-present.
Journal of Biological Chemistry, 1997-present.
Journal of Cell Biology, 1998-present.
Nature Medicine, 1998-present.
Connective Tissue Research, 2000-present.
Matrix Biology, 2001-present.
Developmental Biology, 2001-present.
Arthritis & Rheumatism, 2001-present.
Bone, 2002-present.
FASEB J, 2007-present.
Tissue Engineering, 2007-present.
Osteoarthritis and Cartilage, 2007-present.
Biomaterials, 2017-present

UNIVERSITY TEACHING ROLES

Graduate Faculty member, Programs in Physiology, Cell and Molecular Biology, Molecular Medicine, Genetics, and MD/PhD, Penn State University, University Park, PA, 1995-2002.

Graduate Faculty Member, Programs in Pathobiology, Cell, Molecular Biology and Biochemistry, and MD/PhD, Brown University, Providence, RI, 2003-present.

Trainer, Training Program in Surgical Research, Department of Surgery, Brown Medical School/Rhode Island Hospital, 2009-present.

Member, Center of Biology of Aging, Alpert Medical School of Brown University, 2015-present

Member, Biomedical Engineering Graduate Program, Brown University, 2016-present

Visiting Professor (Sabbaticals):

Ling Qin, PhD	02/14-03/14	Professor and Director, Chin. Hong Kong U.
Gyu-Un Bae, PhD	03/18-02/19	Assoc Prof, Sookmyung Women's U, Korea

Postdoctoral Fellows:

Yisheng Bai, PhD	03/97-08/97	Senior Scientist, Bioserve Company, NJ
Yue Zhang, PhD	03/97-09/02	Instructor, Penn State University
Qiuqian Wu, MD, PhD	07/97-09/02	Assistant Professor, University of Rochester
Xuechu Zhen, MD	02/98-03/99	Instructor, Drexel University
Pengcheng Wang, MD	07/98-07/99	Professor, Hebei University, China
Xiaojuan Sun, MD	01/01-04/03	Instructor, Brown University
Wei Lei, MD, PhD	03/99-09/02	Res. Assistant Professor, Brown Univ.
Katsuzuki Kanbe, MD	03/00-09/02	Prof. Tokyo Women's Medical Univ., Japan
Junming Luo, MD	05/01-08/07	Director, Imaging Core Lab, Uni. Kansas
Xu Yang, MD, PhD	07/02-08/07	Instructor, Brown University
Zhengke Wang, PhD	09/02-10/08	Instructor, Roger Williams Med Center
Yanling Li, MD	09/08-08/09	Professor, Kunming Medical Sch. China

Charles Sun, PhD	09/06-08/09	Research Associate, Brown University
Fiona Zhou, PhD	09/09-08/11	Post-doc, U. Adelaide, Australia
Yingjie Guan, PhD	06/08-05/09	Assistant Professor, Brown University
Yupeng Chen, PhD	07/10-05/15	Associate Professor, U. Connecticut
Hongchuan Yu, PhD	09/12-05/14	Industry position, Chemist
Mingfu Yang, PhD	02/13-02/15	
ChunQiu Zhang, PhD	11/13-10/14	
Yingang Zhang, PhD	02/14-01/15	
Rui Han, MD	03/15-08/15	
Shaohua Du, PhD	04/15-03/16	
Koichi Okamura, PhD	06/15-08/17	Asst Professor, Gunma University, Japan
Nan Hu, MD	02/16-04/17	
Heng Du, MD	07/16-12/17	Attending Physician, Xian Jiaotong Hospital
Hua Liu, MD	08/16-08/17	Assoc Prof of Medicine, Kunming Med U
Daohua Xu, PhD	09/15-10/16	
Zhe Wang, MD	04/17-03/18	
Gyu-Un Bae, PhD	03/18-02/19	Assoc Prof, Sookmyung Women's U, Korea
Yajun Liu, PhD	09/19-	PhD Work Experience, Ohio State U
<u>Medical Residents:</u>		
Mark Lee, MD	09/07-08/09	Assistant Professor, U. Connecticut
Matt Enna, MD	09/06-08/07	Fellow, UCLA
Mimi Kim, MD	09/07-05/09	Fellow, NIH
Neill Li, MD	09/16-	
<u>Graduate Students:</u>		
Akua Owusu-Sarfo	09/06-08/07	Post-doc, U Colorado
Paul Haines	09/08-12/09	Boston University
Xin Li	09/09-07/11	Post-doc, China
Chathuraka Jayasuriya	09/08-05/13	Assistant Professor, Brown University
Kun Yang	09/09-05/15	Post-doc, Harvard
Adeola Adebayo	05/11-08/11	Completing Pathobiology PhD, Brown U
Emma Flaherty	09/12-05/13	Completing Pathobiology PhD, Brown U
Nicholas Lemme	09/13-05/15	Medical student, Alpert Medical School
Yun Gao	09/13-05/18	Post-doc, Brown University
Long Zhang	10/15-03/16	Graduate student, Xian University, China
Shuang Zhu	11/15-10/16	Graduate student, Sun Yat-sen U, China
Pengcheng Liu	10/16-03/18	Graduate student, Xian University, China
Zhiyu Huang	04/17-03/18	Graduate student, Sun Yat-sen U, China
Wenguang Liu	10/17-09/18	Graduate student, Xian University, China
Qiling Yuan	10/17-09/19	Graduate student, Xian University, China
Meng Feng	10/17-09/19	Graduate student, Xian University, China
Brandon Vorrius	09/18-	
Dennis Bonal	09/19-	Completing Pathobiology PhD, Brown U
<u>Medical Students:</u>		
Adam Bier, MD	06/05-05/06	Resident, UCLA
Joseph Lee, MD	06/04-05/07	Resident, Columbia Uni.
Peter Vezeridis, MD	06/03-05/07	Resident, Harvard Medical School
Surena Namdari, MD	06/04-05/07	Resident, U Penn Medical School
Matt Deren, MD	06/08-05/11	Resident, Alpert Medical School

Samir Trehan, MD	06/08-05/11	Resident, Cornell Med.
Edward Cheung	06/07-05/12	Resident, UCLA
Shultz, Paul	06/11-05/14	Resident
Rosario, Jorge	06/12-08/12	Resident, MIT
Cossmann, Jack	06/11-05/14	Dermatology Resident, RWMC
Linda Chao	06/12-05/15	Resident, Alpert Medical School
Travis Spangler	09/14-	Medical student, Alpert Medical School
Peter Lam	09/16-	Medical student, Alpert Medical School

Undergraduate Students:

Aaron Wang	05/00-09/00	John Hopkins Med. Sch.
Vincent Macri	06/03-05/05	Professional Hockey
Daron Kahn	06/03-05/04	Thomas Jefferson Med. School
Wesley Wu	06/05-05/08	Brown Med. School
Carol Lim	06/05-08/08	Harvard Dental School
Jerome Liu	06/05-08/07	Dartmouth Medical School
Riaz Gilliani	10/06-05/08	Dallas Consulting Firm
Edward Cheung	06/07-05/10	Brown Med. School
Joseph Leung	06/08-05/09	Duke Med. School
Kevin Koopman	06/10-05/12	Medical student, UBC
Tiffany Bell	05/11-08/11	Yale University
Han, Alex	05/12-08/12	Brown University
Rajiv Iyengar	09/12-05/15	Medical student, Brown University
So Yun Hur	10/12-05/13	Dental student
Jorge Rosario	05/12-08/12	Medical student, UPR
Ben White	05/13-08/13	Unknown
Anna Zeidman	05/13-08/13	Unknown
Robert Gutierrez	05/13-08/13	Completing B.S., UC Irvine
Brendon Boyle	05/13-05/14	Unknown
Andrew Pirelli	05/14-08/14	Physical Therapy Masters program
Christopher Howard	05/14-08/14	Physical Therapy Masters program
Kaitlyn Tracy	09/13-05/14	Medical student, UCSF
Brandon Vorrius	09/13-05/15	Bioengineering Graduate Program, Brown
Thomas Carroll	09/14-05/15	Completing B.S., Harvard
Simone Douglas	05/14-08/14	Biomedical Engineering Grad, Georgia IT
Giovanni Calixte	05/15-08/15	Completing B.S., Brown
Blake Mello	09/14-05/15	Medical student
Adam Rokicki	09/15-05/16	Graduate student
Abass Noor	09/13-	Medical student
Louis Kang	09/16-05/18	Completing B.S., Brown
Sai Allu	09/17-08/18	Completing B.S.
Kenya Alfaro	05/18-08/18	Completing B.S. California State LB
Wanqing Li	05/18-08/18	Completing B.S.
Jerry Dwyer	05/18-08/18	Completing B.S.
Rachel Walker	05/18-08/18	Completing B.S.
Liam Stamp	05/18-08/18	Completing B.S., URI
Jacob Jamison	05/18-08/19	Completing B.S., Brown
Matthew Lee	09/19-05/22	Completing B.S., Brown (PLME program)
Jonathan Ge	09/19-05/22	Completing B.S., Brown (PLME program)