

# X. Neil Dong, Ph.D.

Assistant Professor  
Department of Health and Kinesiology  
The University of Texas at Tyler  
3900 University Boulevard  
Tyler, TX 75799  
Email: [ndong@uttyler.edu](mailto:ndong@uttyler.edu)  
Tel: 903-565-5615; Fax: (903) 566-7065

## Education

- Ph. D.** in Mechanical Engineering (Concentration: Biomechanics) 2002  
**Columbia University**, New York, NY  
Dissertation Title: [Micromechanics of Osteonal Cortical Bone](#)  
Advisor: X. Edward Guo, Ph.D.
- M. S.** in Engineering Mechanics (Concentration: Sports Biomechanics) 1996  
**Tsinghua University**, Beijing, China
- B. S.** in Mechanical Engineering 1993  
**Huazhong University of Science & Technology**, Wuhan, China

## Academic Appointments

- 2010-Present **Assistant Professor**, Department of Health and Kinesiology, the University of Texas at Tyler, Tyler, Texas
- 2007-2010 **Assistant Professor of Research**, Department of Mechanical Engineering, University of Texas at San Antonio, San Antonio, Texas
- 2004-2006 **Visiting Research Scholar**, Orthopaedic Research Laboratories, Department of Orthopaedic Surgery, University of California at Davis Medical Center, Sacramento, California
- 2002-2004 **Postdoctoral Associate**, Bone and Joint Center, Henry Ford Health System, Detroit, Michigan
- 1997-2002 **Research Assistant**, Bone Bioengineering Laboratory, Departments of Mechanical and Biomedical Engineering, Columbia University, New York
- 1996-1997 **Teaching Assistant**, Department of Mechanical Engineering, Auburn University, Alabama
- 1993-1996 **Research Assistant**, Sports Biomechanics Laboratory, Division of Sports Science and Physical Education, Tsinghua University, Beijing, China

## Awards and Honors

- New Researcher Award**, Office of Sponsored Research, The University of Texas at Tyler, Tyler, Texas 2012
- Graphic illustrations**, the cover of *Bone*, Volume 47, Issue 6 2010
- National Science and Technology Achievement**, the Ministry of Science and Technology, China 1998
- New Investigator Presentation Award**, Annual Meeting of Chinese Biomedical Engineering Society, Beijing, China 1995

## Professional Society Memberships

- International Chinese Hard Tissue Society, 2011-Present
- Texas ACSM, 2011-Present

Sigma Xi, the Scientific Research Society, 2003-Present  
Orthopaedic Research Society, 2000-Present  
American Society of Mechanical Engineers, 1997-Present

## **Teaching Interests**

Biomechanics  
Anatomical Kinesiology

## **Teaching Experiences**

### **Undergraduate Courses**

**Instructor**, KINE 3334, Biomechanics and Anatomical Kinesiology, University of Texas at Tyler, Fall 2010 - Present

**Instructor**, KINE 3135, Biomechanics and Anatomical Kinesiology Laboratory, University of Texas at Tyler, Fall 2010 - Present

**Guest Lecture**, PHYS 1301, College Physics I, University of Texas at Tyler, Spring 2011 - Present

### **Graduate Courses**

**Instructor**, KINE 5335, Biomechanics, University of Texas at Tyler, Spring 2011 – Present

### **Theses/Dissertations Directed**

Fenter B. (2012). The effect of a three set tennis match on knee kinematics and leg muscle activation during the tennis serve. Master's thesis, Department of Health and Kinesiology, the University of Texas at Tyler.

## **Research Interests**

**Stress fractures:** pathogenesis and prevention of stress fractures in athletes.

**Sports biomechanics:** neuromuscular training strategies for prevention of knee joint injuries in athletes.

**Occupational biomechanics:** intervention strategies to alleviate chronic neck pain of computer workers

## **Research Support**

### **Ongoing Research Support**

1. Source: National Institutes of Health / NIAMS  
**Title: Enhanced fracture risk assessment of spine using stochastically treated DXA image**  
Project Period: 7/1/2012 to 6/30/2015  
Amount: \$384,728  
Role: Principal Investigator
2. Source: The University of Texas at Tyler  
**Title: Rehabilitation strategies to overcome quadriceps weakness for athletes with anterior cruciate ligament (ACL) reconstruction**  
Project Period: 9/1/2012 to 12/30/2012  
Amount: \$15,000  
Role: Principal Investigator

### **Past Research Support**

1. Source: Centers for Disease Control and Prevention/ National Institute for Occupational Safety and Health/Southwest Center for Occupational Health

**Title: Development of a portable EMG-based biofeedback system to alleviate chronic neck pain**

Project Period: 7/1/2011 to 6/30/2012

Amount: \$11,565

Role: Principal Investigator

2. Source: National Science Foundation

**Title: Nanomechanics based determination of in-situ toughness of bone**

Project Period: 6/01/2011 to 8/31/2011

Amount: \$10,740

Role: Co-Investigator (PI: Xiaodu Wang at the University of Texas at San Antonio)

3. Source: National Institutes of Health / NIAMS

**Title: Post-yield Behavior vs. Bone quality**

Project Period: 1/1/2011 to 6/30/2011

Amount: \$2,000

Role: Co-Investigator (PI: Xiaodu Wang at the University of Texas at San Antonio)

## **Publications**

### **Books**

1. Wang X., Nyman J.S., **Dong XN**, Leng H, Reyes M. (2010) Biomechanics in bone tissue engineering. Morgran & Claypool Publishers, LaPorte, Colorado.

### **Book Chapters**

1. **Dong XN**, Reyes M, Leng H, Wang X. (2009) Age-related micro- and ultrastructural changes in women's bone. In: Women and Aging: New Research. Editors: H. T. Benninghouse et al. Nova Science Publishers. Hauppauge, New York.
2. Wang X, Reyes M, **Dong XN**, Leng H. (2008) Micromechanical testing of bone tissues in tension. In The protocols in musculoskeletal research- A practical manual for laboratory techniques. Editors: K. Leung et al. World Scientific. Hackensack, New Jersey.

### **Referred Journal Publications**

1. **Dong XN**, Shirvaikar M, Wang X. Stochastic assessment of 2D projection images of trabecular bone predicts its strength and microarchitecture. Bone, 2013, accepted upon revision.
2. Leng H, Reyes M, **Dong XN**, Wang X. Effect on mechanical properties of the collagen phase human cortical bone in different orientations. Bone, 2013, in press.
3. **Dong XN**, Wang X. Assessment of bone fragility with clinical imaging modalities. Hard Tissue 2013;2:7.
4. **Dong XN**, Luo Q, Wang X. Progressive post-yield behavior of human cortical bone in pure shear. Bone, 2013;54:1-5.
5. **Dong XN**, Acuna RL, Luo Q, Wang X. Orientation dependence of progressive post-yield behavior of human cortical bone in compression. Journal of Biomechanics, 2012: 45: 2829-2834.
6. Giri B, Almer JD, **Dong XN**, and Wang X. In situ mechanical behavior of mineral crystals in human cortical bone under compressive load using

- synchrotron X-ray scattering techniques. *Journal of Mechanical Behavior of Biomedical Materials*, 2012: 14: 101-12.
7. Islam A., **Dong XN**, Wang X. Mechanical modeling of a nanoscratch test for determination of in situ toughness of bone. *Journal of the Mechanical Behavior of Biomedical Materials*, 2011: 4: 943-52.
  8. **Dong XN**, Qin A, Xu J, Wang X. In situ accumulation of advanced glycation endproducts (AGEs) in bone matrix and its correlation with osteoclastic bone resorption. *Bone*, 2011: 49:173-84.
  9. Luo Q, Nakade R, **Dong XN**, Rong Q, Wang X. Effect of mineral-collagen interfacial behavior on the microdamage progression in bone using a probabilistic cohesive finite element model. *Journal of the Mechanical Behavior of Biomedical Materials*, 2011:4:943-52.
  10. **Dong XN**, Leng H, Ran Q, Wang X. Finding of microdamage morphology differences in mice femoral bones with distinct mineralization levels. *Journal of Mechanics in Medicine and Biology*, 2011:11:423-32.
  11. **Dong XN**, Almer JD, Wang X. Post-yield nanomechanics of human cortical bone in compression using synchrotron x-ray scattering techniques. *Journal of Biomechanics*, 2011:44: 676-682.
  12. **Dong XN**, Luo Q, Sparkman DM, Millwater HR, Wang X. Random field assessment of nanoscopic inhomogeneity of bone. *Bone*, 2010: 47: 1080-1084.
  13. **Dong XN**, Zoghi M., Ran Q, Wang X. Collagen mutation causes changes of the microdamage morphology in bone in an OI mice model. *Bone*, 2010: 47: 1071-1075.
  14. Luo Q, Leng H, Acuna R, **Dong XN**, Rong Q, Wang X. Constitutive relationship of tissue behavior with damage accumulation of human cortical bone. *Journal of Biomechanics*, 2010: 43: 2356-2361.
  15. Yeni YN, **Dong XN**, Zhang B, Gibson GJ, Fyhrie DP. Cancellous bone properties and matrix content of TGF- $\beta$ 2 and IGF-I in human tibia: A pilot study. *Clinical Orthopaedics and Related Research*. 2009: 467: 3079-3086.
  16. Nyman JS, Leng H., **Dong XN**, Wang X. Differences in the mechanical behavior of cortical bone between compression and tension when subjected to progressive loading. *Journal of the mechanical behavior of biomedical materials*, 2009: 2: 613-619.
  17. Leng H, **Dong XN**, Wang X. Age-related progressive post-yield behavior of human cortical bone in compression. *Journal of Biomechanics*, *Journal of Biomechanics*, 2009: 42: 491-497.
  18. **Dong XN**, Guda T, Millwater HR, Wang X. Probabilistic modeling of microdamage formation in bone tissue. *Journal of Biomechanics*, *Journal of Biomechanics*, 2009: 42: 202-209.
  19. Yeni YN, Shaffer RR, Baker KC, **Dong XN**, Grimm MJ, Les CM, Fyhrie DP. The effect of yield damage on the viscoelastic properties of cortical bone tissue as measured by dynamical mechanical analysis. *Journal of Biomedical Materials Research*, 2007: 82: 530-537.
  20. **Dong XN**, Guo XE. Prediction of cortical bone elastic constants by a two-level micromechanical model using a generalized self-consistent method. *Journal of Biomechanical Engineering*, 2006:128: 309 - 316.
  21. Yeni YN, Kim DG, **Dong XN**, Turner AS, Les CM, Fyhrie DP. Do sacrificial bonds affect the viscoelastic and fracture properties of bone? *Clinical Orthopaedics and Related Research*, 2006: 443: 101-108.

22. Kim D, **Dong XN**, Cao T, Baker K, Shaffer R, Fyhrie DP, Yeni YN. Evaluation of filler materials used for uniform load distribution at boundaries during structural biomechanical testing of whole vertebrae. *Journal of Biomechanical Engineering*, 2006: 128: 161-165.
23. Zauel R, Yeni YN, Bay BK, **Dong XN**, Fyhrie DP. Comparison of the linear finite element prediction of deformation and strain of human cancellous bone to 3D digital volume correlation measurements. *Journal of Biomechanical Engineering*, 2006: 128: 1-6.
24. **Dong XN**, Zhang X, Guo XE. Interfacial strength of cement lines in human cortical bone. *Mechanics and Chemistry of Biosystems* 2005: 2: 63-68.
25. **Dong XN**, Yeni YN, Zhang B, Les CM, Gibson GJ, Fyhrie DP. The matrix concentration of IGF-I is negatively associated with biomechanical properties of human tibial cancellous bone within individual subjects. *Calcified Tissue International* 2005: 77: 37-44.
26. **Dong XN**, Zhang X, Huang YY, Guo XE. A generalized self-consistent estimate for the effective elastic moduli of fiber-reinforced composite materials with multiple transversely isotropic inclusions. *International Journal of Mechanical Sciences* 2005: 47: 922-940.
27. Yeni YN, Christopherson GT, **Dong XN**, Kim D, Fyhrie DP. The effect of micro computed tomography voxel size on the finite element model accuracy for human cancellous bone. *Journal of Biomechanical Engineering* 2005: 127: 1-8.
28. Kim D, Christopherson GT, **Dong XN**, Fyhrie DP, Yeni YN. The effect of micro computed tomography scanning and reconstruction voxel size on the accuracy of stereological measurements in human cancellous bone. *Bone* 2004: 35: 1375-1382.
29. Yeni YN, **Dong XN**, Fyhrie DP, Les CM. The dependence between the strength and stiffness of cancellous and cortical bone tissue for tension and compression: extension of a unifying principle. *Bio-Medical Materials and Engineering* 2004: 14: 303-310.
30. **Dong XN**, Guo XE. The dependence of transversely isotropic elasticity of human femoral cortical bone on porosity. *Journal of Biomechanics* 2004:37:1281-1287.
31. **Dong XN**, Guo XE. Geometric determinants to cement line debonding and osteonal lamellae failure in osteon pushout tests. *Journal of Biomechanical Engineering* 2004:126:387-390.
32. **Dong XN**, Yeni YN, Les CM, Fyhrie DP. Effects of specimen geometry and end boundary conditions on the viscoelastic properties of cancellous bone measured by dynamic mechanical analysis. *Journal of Biomedical Materials Research* 2004:68A:573-583.
33. Xiao H, Zheng X, **Dong X**, Hua D, Li Q, Luo H, Liu J, Liu W. Research on the body center of mass of Chinese adults. *International Journal of Industrial Ergonomics* 1999:23:129-133.
34. Huang B, Wang C, Zhang B, Wang R, **Dong X**, Wang Y. Quick estimation for microscopic anisotropic properties of polycrystalline Cu and Cu ZnAl sheets. *Rare Metals* 1996:15:123-127.

#### **Peer-reviewed Conference Papers**

1. Fenter B., Marzilli S., **Dong XN**. Decrease in knee flexion is observed in a three set tennis match on knee kinematics during the tennis serve. *Annual*

- Meeting of Texas Chapter of American College of Sports Medicine, March 1-2, Austin, Texas, 2012.
2. Cline H., Stephens M., Flynn D., Marzilli S., **Dong XN**. Muscle recruitment of upper trapezius for computer workers with chronic neck pain. Annual Meeting of Texas Chapter of American College of Sports Medicine, March 1-2, Austin, Texas, 2012.
  3. Giri B., Almer JD, **Dong XN**, Wang X. In situ deformation of bone mineral crystals under tensile and compressive loads. Annual Meeting of Orthopaedic Research Society, February 4-7, San Francisco, CA, 2012.
  4. Giri B., Almer JD, **Dong XN**, Wang X. Pre-strain and structural integrity of bone mineral crystals in different loading modes. Annual Meeting of Orthopaedic Research Society, February 4-7, San Francisco, CA, 2012.
  5. Giri B, **Dong XN**, Almer JD, Wang X. Shear strain of mineral crystals calculated using wide-angle x-ray scattering (WAXS) techniques. Proceedings of the ASME 2011 Summer Bioengineering Conference, June 22-25, Nemacon Woodlands Resort, Farmington, Pennsylvania, USA.
  6. **Dong XN**, Huang N, Shirvaikar MV, Wang X. Inhomogeneity of bone mineral distribution in 2D projection images of trabecular bone is associated with its micro-architecture and biomechanical properties. Proceedings of the ASME 2011 Summer Bioengineering Conference, June 22-25, Nemacon Woodlands Resort, Farmington, Pennsylvania, USA.
  7. **Dong XN**, Luo Q, Giri B, Wang X. Progressive post-yield behavior of human cortical bone in shear. Proceedings of the ASME 2011 Summer Bioengineering Conference, June 22-25, Nemacon Woodlands Resort, Farmington, Pennsylvania, USA.
  8. Islam A., **Dong XN**, Wang X. In situ toughness of osteogenesis imperfecta mouse bone determined by nanoscratch. Transactions of Orthopaedic Research Society, Volume 36:2234, Long Beach, CA, 2011.
  9. Islam A., **Dong XN**, Wang X. A mechanistic model of the nanoscratch test to determine the in situ toughness of bone. 2010 Biomedical Engineering Society Annual Fall Meeting, October 6-9, 2010, Austin, TX, USA.
  10. Paterson AR, Belzung A, **Dong XN**, Almer J, Wang X. Variation of mineral crystal orientation under uniaxial load using synchrotron x-ray scattering techniques. 2010 Biomedical Engineering Society Annual Fall Meeting, October 6-9, 2010, Austin, TX, USA.
  11. Bhattacharya D, **Dong XN**, An Q, Xu J, Wang X. AGEs promote in vitro bone resorption activities of human cortical bone. 2010 Biomedical Engineering Society Annual Fall Meeting, October 6-9, 2010, Austin, TX, USA.
  12. Luo Q, Leng H, Acuna R, **Dong XN**, Rong Q, Wang X. A semi-empirical elastic-plastic-visco-damage constitutive model of cortical bone. Proceedings of the ASME 2010 Summer Bioengineering Conference, June 16-19, Grand Beach Resort, Naples, FL, USA.
  13. **Dong XN**, Zoghi M, Ran Q, Wang X. Less diffuse damage was observed in osteogenesis imperfecta mice femurs than wild-type controls. Proceedings of the ASME 2010 Summer Bioengineering Conference, June 16-19, Grand Beach Resort, Naples, FL, USA.
  14. Acuna RL, **Dong XN**, Wang X. Post-yield behavior of human cortical bone is transversely isotropic in compression. Transactions of Orthopaedic Research Society, Volume 35:625, New Orleans, LA, 2010.

15. **Dong XN**, An Q, Leng H, Appleford MR, Xu J, Zheng M, Wang X. Temporal/spatial distribution of pentosidine accumulation in human cortical bone and its role in bone resorption. Transactions of Orthopaedic Research Society, Volume 35:583, New Orleans, LA, 2010.
16. **Dong XN**, Almer JD, Wang X. Nanomechanics of post-yield deformation of cortical bone under compression using novel synchrotron X-ray scattering techniques. Transactions of Orthopaedic Research Society, Volume 35:337, New Orleans, LA, 2010.
17. **Dong XN**, Sparkman D, Millwater H, Wang X. A new approach to assess bone heterogeneity at multiple length scales. 2009 Biomedical Engineering Society Annual Fall Meeting, October 7-10, 2009, Pittsburgh, PA, USA.
18. **Dong XN**, Leng H, Wang X. Low mineralization tends to facilitate the formation of diffuse damage in bone. Proceedings of the ASME 2009 Summer Bioengineering Conference, June 17-21, Resort at Squaw Creek, Lake Tahoe, CA, USA.
19. **Dong XN**, Sparkman DM, Millwater HR, Wang X. Interfacial debonding affects microdamage progression of bone modeled as mineral-collagen composites. Transactions of Orthopaedic Research Society 2009:34:672.
20. **Dong XN**, Sparkman DM, Leng H, Millwater HR, Wang X. Probabilistic prediction of microdamage progression in bone. Proceedings of the ASME 2008 Summer Bioengineering Conference (SBC2008) June 25-29, Marriott Resort, Marco Island, Florida, USA.
21. **Dong XN**, Guda T, Millwater HR, Wang X. Is interfacial debonding between collagen and mineral a premise for the formation of diffuse damage in bone tissue? Transactions of Orthopaedic Research Society 2008:33:927.
22. **Dong XN**, Guda T, Millwater HR, Wang X. Microcracking and diffuse damage can be predicted from probabilistic modeling of microdamage formation in bone tissue. BMES 2007 Annual Fall Meeting, Sep. 26-28, 2007, Los Angeles, CA.
23. **Dong XN**, Paruchuru SP, Wang X. Finite element simulation of nanoindentation tests for cortical bone using a damaged plastic bone. 31st Annual Meeting of American Society of Biomechanics, Aug 22-25, 2007, Stanford, CA.
24. Leng H, Nyman JS, Dong X, Reyes MJ, Wang X. A semi-empirical constitutive model for post yield behavior of bone in tension. Proceedings of the ASME Summer Bioengineering Conference 2007.
25. Yeni YN, Kim D, **Dong XN**, Pechey C, Les CM, Fyhrie DP. Do sacrificial bonds affect the viscoelastic and fracture properties of undemineralized human cortical bone tissue? Transactions of Orthopaedic Research Society 2006:31:1762.
26. **Dong XN**, Yeni YN, Zhang B, Les CM, Gibson GJ, Fyhrie DP. Associations between IGF-I matrix concentration and biomechanical properties of cancellous bone from proximal human tibiae. Transactions of Orthopaedic Research Society 2005:30:675.
27. Yeni YN, Shaffer RR, Baker KC, **Dong XN**, Les CM, Turner AS, Fyhrie DP. The effect of yield damage on the viscoelastic properties of cortical bone tissue as measured by dynamic mechanical analysis. Transactions of Orthopaedic Research Society 2005:30:667.

28. Yeni YN, **Dong XN**, Hunt CA, Kim D, Pechey C, Les CM, Turner AS, Fyhrie DP. Nondestructive viscoelastic measurements predict cortical bone strength. Transactions of Orthopaedic Research Society 2005;30:336.
29. **Dong XN**, Yeni YN, Zhang B, Les CM, Gibson GJ, Fyhrie DP. The matrix concentration of IGF-I in cancellous bone of proximal human tibiae is predicted by trabecular level stress and architectural parameters. Transactions of Orthopaedic Research Society 2005;30:190.
30. Yeni YN, Christopherson GT, **Dong XN**, Fyhrie DP. The effect of scanning and reconstruction voxel size of microtomography images and end boundary conditions on the finite element-calculated apparent stiffness and trabecular stress distributions in human cancellous bone. Transactions of Orthopaedic Research Society 2004;29:98.
31. Yeni YN, **Dong XN**, Cao T, Baker, KC, Schaffer RR, Fyhrie DP. Evaluation of filler materials used for uniform load distribution at boundaries during structural biomechanical testing of whole vertebrae. Transactions of Orthopaedic Research Society 2004;29:1116.
32. Fyhrie DP, Yeni YN, Bay, BK, Smith TS, **Dong XN**, Zauel R. Comparison of 3D experimental and finite element estimation of cancellous bone deformation and strain. Transactions of Orthopaedic Research Society 2004;29:501.
33. Fyhrie DP, **Dong XN**, Gibson GJ. Calcium ions disproportionately affect cartilage swelling: evidence for counter-ion condensation in cartilage. Transactions of Orthopaedic Research Society 2004;29:529.
34. **Dong XN**, Yeni YN, Zhang B, Gibosn GJ, Fyhrie DP. TGF- $\beta$ 1 and TGF- $\beta$ 2 concentration in tibial cancellous bone matrix correlate with tissue density, strength and modulus and are predicted by mechanical strain. Transactions of Orthopaedic Research Society 2004;29:499.
35. **Dong XN**, Yeni YN, Les CM, Turner AS, Fyhrie DP. Are sacrificial bonds divalent calcium cross-links between collagen molecules? Transactions of Orthopaedic Research Society 2004;29:386.
36. Fyhrie DP, Yeni YN, **Dong XN**. Strain amplification in cancellous bone. 2003 BMES Annual Fall Meeting, October 1-4, 2003, Renaissance Nashville Hotel, Nashville, TN.
37. **Dong XN**, Yeni YN, Zhang B, Gibson GJ, Fyhrie DP. Bone mass, strength, and stiffness are reduced in human tibial cancellous bone tissue with high TGF- $\beta$ 2 Content. 2003 Summer Bioengineering Conference, June 25-29, Key Biscayne, Florida.
38. **Dong XN**, Yeni YN, Les CM, Fyhrie DP. Dynamic mechanical analysis of cancellous bone: the effect of specimen geometry and end boundary conditions. Transactions of Orthopaedic Research Society 2003;28:425.
39. **Dong XN**, Yeni YN, Christopherson GT, Les CM, Turner AS, Fyhrie DP. The influence of sacrificial bonds on the viscoelastic properties of cortical bone. Transactions of Orthopaedic Research Society 2003;28:53.
40. **Dong XN**, Guo, XE. The influence of experiment conditions on osteon pushout tests. BED 2001;51:63-64.
41. **Dong XN**, Guo XE. Predicting a power law between elastic modulus and porosity in cortical bone: a micromechanics model. BED 2001;51:65-66.
42. **Dong XN**, Guo XE. Extracting intrinsic debonding strength of cement lines for osteon pushout experiments. Transactions of Orthopaedic Research Society 2001;26:14



43. **Dong XN**, Guo XE. Is the cement line a weak interface? Transactions of Orthopaedic Research Society, 2000:25:36.
44. **Dong XN**, Huang YY, Guo XE. Transversely isotropic model of osteonal cortical bone: contribution of haversian and resorptive porosity. BED 1999: 43:183-184.
45. **Dong XN**, Guo XE. Debonding strength of cement lines in human cortical bone. BED 1999:42:409-410.
46. Guo XE, **Dong XN**, Huang YY. Generalized self-consistent method for osteonal cortical bone modeling. BED 1998:39:271-272.
47. Xiao H, Zheng X, **Dong X**. Research on the basic human-body segment parameters of Chinese adults. The 4<sup>th</sup> Pan Pacific Conference on Occupational Ergonomics, Taipei, Taiwan, 1996.
48. **Dong X**, Zheng X. The design and application of a segmental velocity measuring system. Annual Meeting of Chinese Biomedical Engineering Society, Beijing, China, 1995.

## Services

### University Service

Member, Committee for Commencement Exercises, College of Nursing and Health Sciences, the University of Texas at Tyler, 2010 - 2012  
 Member, Curriculum Committee, College of Nursing and Health Sciences, the University of Texas at Tyler, 2011-2012

### Professional Service

#### Reviewer for Journals

*Bone*, 2010-Present  
*Journal of Mechanics in Medicine and Biology*, 2008-Present  
*Journal of Biomechanics*, 2005-Present  
*Journal of Biomechanical Engineering*, 2003-Present

#### Ad Hoc Reviewer

NIOSH Pilot Projects Research Training Grants, 2012  
*Mechanical Systems and Signal Processing*, 2012  
 Summer Bioengineering Meeting, 2011 and 2013  
*Journal of Biomedical Materials Research*, 2010  
*Matrix Biology*, 2010  
*Journal of Orthopaedic Research*, 2009  
*Cell Tissue Organs*, 2009

#### Positions and/or Offices Held in Professional Organizations

Organizing Committee Member for 2011 ASBMR-ICHTS Membership Meeting, International Chinese Hard Tissue Society (ICHTS)  
 Communication Committee Member, International Chinese Hard Tissue Society (ICHTS), 2011-Present