

Curriculum Vitae
Lei Wei, M.D., Ph.D.

TITLE: Research Assistant Professor

ADDRESS: Molecular Biology Laboratory
Coro West, Suite 402
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Providence, Rhode Island 02903

EDUCATION/TRAINING

Guiyang Medical College, China	M.D.	1983	Medicine
Karolinska Institute, Stockholm, Sweden	Ph.D.	1999	Osteoarthritis
Penn State University College of Medicine, PA	Post-Doc	1999-2002	Molecular Biology

POSITIONS AND HONORS

Position and Employment

1983-1994: Researcher / Lecturer, Dept. of Orthopedics, Affiliated Hospital of Guiyang Medical College, China

1994-1999: Ph.D. candidate, Dept. of Orthopedics, Huddinge University Hospital, Karolinska Institute, Sweden

1999-2002: Post-doctoral Fellow, Dept. of Orthopedics, Penn State University, College of Medicine, Hershey, PA

2002-present: Research Associate, Rhode Island Hospital, Providence, RI

2004-present: Research Assistant Professor, Brown Medical School / Rhode Island Hospital, Providence, RI

Other Experience and Professional Memberships

1999-current: Orthopaedic Research Society, active member

2001-current: International Chinese Hard Tissue Society (ICHTS)

Honors

Visiting Scholarship, China Education foundation (1994-1995)

Research Fellowship, Shrine Hospital for Children (1999-2001)

New Investigator Recognition Awards, Orthopaedic Research Society (2001)

Young Investigator Award, Osteoarthritis Research Society International (OARSI) (2002)

Young Investigator Award, Osteoarthritis Research Society International (OARSI) (2005)

SELECTED PEER-REVIEWED PUBLICATIONS (in chronological order)

1. Wei L. Mu W, Zhen ZE. Treatment of Palellar Fracture with Silk Thread for Sewing. Guizhou Medical Journal. 1988; 12 (4): 203-4.
2. Wei L. Chen XD. Synovial Osteochondromatosis. Guizhou Medical Journal. 1989; 13 (3): 169. (Chinese).
3. Wei L. and Chen XD. The use of epidural needle in bone biopsy Journal of Guiyang Medical college 1989; 14(2): 151.
4. Wei L. Mu W, Zhen ZE. Application of Niti Shape-Memory Alloy Compression Staple for Palellar fracture. Chinese Journal of Traumatology. 1989; 5 (3): 162-4. (Chinese).
5. Wei L. Chen XD, Sang XW. Tubercle in musculus gastrocnemius(case report) Guizhou Medical Journal. 1990: 14(4): 208.
6. Wei L. and Pang EG. Fracture of Ulna and Radius on Forearm. Guizhou Medical Journal. 1992; 16 (2): 108. (Chinese).
7. Wei L. and Chen XD. Treatment of idiopathic Scoliosis with Electrical Muscle Stimulation. Guizhou Medical Journal. 1992; 16 (3): 186-188. (Chinese).
8. Wei L. Lu ZX, Zhen ZE and Li DZ. Synovial Sheath of Tendon in Bone. Chinese Journal of Orthopaedics. 1992; 12 (3): 197. (Chinese).
9. Wei L. Shong XW and Ling PZ. Intervertebral Infection after Operation. Guizhou Medical Journal. 1992; 16 (6): 345-347. (Chinese).
10. Wei L. Zhen ZE, Lu XK and Muong HC. Effects of Hyperbaric Oxygenation Therapy in the acute Phase of Spinal Cord Injury. Guizhou medical Journal. 1992, 16 (6): 178-190. (Chinese).
11. Wei L. and Pang EG. Hand Injury. An Analysis of 8544 cases. Guizhou Medical Journal. 1993; 17 (1):54.
12. Wei L. Chen XD and Xang SW. The relationship between T3, T4 and Acute spinal cord injury. Journal of Spine and Spinal Cord. 1994, 4 (7): 66-68. (Chinese).
13. Yu Yanni and Wei Lei. Effect of vitamin C on the contents of serum and bone fluoride in the experimental fluorosis rats. J China Regional Disease. 1995: 14(5); 268-270.
14. Yu Yanni and Wei Lei. Stereological study on the joint synovial cells in the experimental rats with fluorosis. J China Regional Disease. 1995: 14(5); 263-265.
15. Wei, L., Svensson, O, and Hjerpe, A. Articular cartilage proteoglycans during development of primary osteoarthritis in the guinea pig. Acta Orthop Scand (suppl 270) 1996; 67:63.
16. Yu Yanni and Wei Lei. Effect of vitamin C on the joint synovial cells in the experimental fluorosis rats with stereological method. China comprehensive medicine. 1996: 3: 41-43.
17. Edin de Bri, Wei, L., Finn P Reinholt, Silwa MW, Dick Heinegard, and Svensson, O. Ultrastructural immunolocalization of bone sialoprotein in guinea pig osteoarthritis. Osteoarthritis and Cartilage. 1997; 5 (6): 387-393.
18. Wei, L., Svensson, O. and Hjerpe, A. Correlation of Morphological and Biochemical Changes in the Natural History of the Spontaneous Osteoarthritis in Guinea Pigs. Arthritis Rheumatism. 1997: 40 (11): 2075-2083.

19. Wei, L., Hjerpe, A., and Svensson, O. Structural and biochemical changes in guinea pig osteoarthritis after surgically altered load. *Acta orthopaedica Scandinavica Supplementum*. 1998; 280 (69): 24.
20. Wei, L., Hjerpe, A., and Svensson, O. Proteoglycan turnover during development of spontaneous osteoarthrosis in guinea pig. *Acta Orthopaedica Scandinavica Supplementum*. 1998; 280 (69):23.
21. Edin de Bri, Wei, Lei, Olle Svesson, majeed Chowdhury, Susan A Mooak, and Robert A Greenwald. Effect of an inhibitor of matrix metalloproteinases on spontaneous osteoarthritis in guinea pigs. *Dental Research* 1998;vol12:82-85.
22. Wei, L., Svensson, O., and Hjerpe, A. Metabolic Turnover of Sulfated Glycosaminoglycans and Proteoglycans in Guinea Pigs Knee Articular Cartilage during Development of Primary Osteoarthrosis. *Osteoarthritis and Cartilage*. 1998; 6 (6): 410-416.
23. Wei, L., Lundberg, A., and Svensson, O. Mechanical Load and Primary Guinea Pig Osteoarthrosis. *Acta Scandinavica Orthopadica*. 1998; 69 (4): 351-357.
24. LP Zou, DH Ma, L Wei, van der Meide PH, Mix Eilhard and J Zhu. IFN- β suppresses experimental autoimmune neuritis in Lewis rats by inhibiting the migration of inflammatory cells into peripheral nervous tissue. *J Neuroscience Research*. 1999; 56: 123-130.
25. LP Zou, DH Ma, M Levi, B Wahren, BG Xiao, L Wei, E Mix, van der Meide PH, J Zhu. Antigen-specific immunosuppression: nasal tolerance of P0 protein peptides for the prevention and treatment of experimental autoimmune neuritis in Lewis rats. *Journal of Neuroimmunology*. 1999; 94: 109-121.
26. Wei, L. Guinea Pig Osteoarthritis-Morphological and Biochemical Studies. Printed in Sweden by Repro Print AB, Stockholm 1999: 2. ISBN 91-628-3361-8.
27. Edin de Bri and Wei, Lei. Biochemical and histological effects of tetracyclines on spontaneous osteoarthritis in guinea pigs. *Image Anal Stereol* 2000;19:125-131.
28. Xuechu Zhen, Lei Wei, Qiuqian Wu, Yue Zhang, and Qian Chen. Mitogen-Activated Protein Kinase p38 Mediates Regulation of Chondrocyte Differentiation by Parathyroid Hormone. *Journal of Biological Chemistry* 2001; 276(7): 4879-4885.
29. Wei, L., Hjerpe, A., and Svensson, O. The effect of load on articular cartilage matrix and the development of guinea-pig osteoarthritis. *Osteoarthritis and Cartilage* 2001; 9(5): 447-53.
30. Wei, L., Hultenby K, Hjerpe, A. Brismar H and Svensson, O. Distribution of chondroitin 4-sulfate epitopes (2/B/6) in spontaneous guinea pig osteoarthrosis. *Acta Scandinavica Orthopadica*. 2003; 74(1): 16-21.
31. Brismar BH, Wei L, Hjerpe A, Svensson O. The effect of body mass and physical activity on the development of guinea pig osteoarthrosis. *Acta Orthop Scand*. 2003; 74(4): 442-8.
32. Chen, Q., Lei, W., Wang, Z., Sun, X., Luo, J., and Yang, X. Endochondral bone formation and extracellular matrix, *Current Topics in Bone Biology*, 145-162, Deng, H., and Liu, Y. (Eds) World Scientific Publishing Co. 2005.
33. Sun X, Wei L, Liden J, Hui G, Dahlman-Wright K, Hjerpe A, Dobra K. Molecular characterization of tumour heterogeneity and malignant mesothelioma cell differentiation by gene profiling. *J Pathol*. 2005 Jul 8;207(1):91-101.

34. Wei L, Sun X, Terek R, Chen Q. Down-Regulation of A Chemokine Receptor CXCR4 by Small Interfering RNA Inhibits MMP13 Release and Enhances TIMP 1 Expression in Articular Chondrocytes. Osteoarthritis and Cartilage 2005; 13: Supplement A S29.
35. Wei L, Sun X, Terek R, Chen Q. CD95 induced osteoarthritic chondrocytes apoptosis and necrosis: dependency on p38 mitogen-activated protein kinase. Arthritis Research & Therapy 2006; 8(2);R37.
36. Lei Wei, Xiaojuan Sun, Zhengke Wang, Changqi Sun, Katsuaki Kanbe*, Richard Terek and Qian Chen. Chondrocyte Death Induced by Pathological Concentration of Chemokine Stromal Cell-Derived Factor-1. Rheumatology (Accepted 2006).
37. Louise Van Der Weyden, Lei Wei, and Qian Chen. Functional knockout of the matrilin-3 gene causes premature chondrocyte maturation to hypertrophy and increases bone mineral density and osteoarthritis. The American Journal of Pathology (Second revision).

RESEARCH SUPPORT

Pending Applications

SDF-1/CXCR4 Pathway Regulates OA Cartilage Matrix Degradation. Arthritis National Research Foundation. Principal Investigator.

Ongoing Research Support

Chemokine Regulation of Cartilage Matrix Resorption. NIH 1R03 AR052479-01A1. Principal Investigator. 04/01/2006-03/31/2009.

Completed Research Support

Resistance Training Induced Arthritis of the Knee: Alterations of Gene Expression in Articular Cartilage. George L. Lavery Foundation, 2000. Black, K.P., Principal Investigator. Wei, L., Donahue, H., and Chen, Q., Co-Investigator. 32,095. (Local grant; one given; one given per year).