

DIVISION OF PEDIATRIC ORTHOPAEDIC SURGERY OUR TEAM

FRANCIS Y. LEE, MD



Dr. Lee joined the department in 1999 after completing a Musculoskeletal Tumor Fellowship at the Massachusetts General Hospital and Boston Children's Hospital, and a Pediatric Orthopedic Surgery Fellowship at the Hospital for Sick Children in Toronto. He is currently an Assistant Professor of Orthopedic Surgery at Columbia University. He specializes in pediatric orthopaedic surgery including spine deformity and complex developmental orthopaedic disorders, musculoskeletal tumors and bone disease.

Dr. Lee serves as the Chief of the Tumor & Bone Disease service and Director of Center for Orthopaedic Research. He is conducting both basic and clinical studies on musculoskeletal disorders. He is a recipient of American Academy of Orthopaedic Surgeons/Orthopaedic Research Education and Foundation Clinician Scientist Traveling Fellowship Award (2004-2005).

Dr. Lee was recently appointed Vice Chairman of Research in the Department of Orthopaedic Surgery. He is one of a handful of orthopedic surgeons with an NIH R01 research grant.

CLINICAL INTERESTS

- Bone and Soft Tissue Tumors in Children and Adults
- Complex Limb Deformities & Limb Lengthening
- Children ' s Osteoporosis, Syndromes and Bone Disease
- Congenital and Acquired Hip Disorders
- Spine Deformity (Scoliosis)
- Pediatric Foot Construction

BOARD CERTIFICATIONS

American Board of Orthopaedic Surgery

LICENSURE

New York
New Jersey
Massachusetts

EDUCATION

Fellowship

1998-1999

The Hospital for Sick Children
University of Toronto
Pediatric Orthopaedic Surgery
Clinical Fellow

1997-1998

Harvard Medical School
Mass General & Children's Hospital
Orthopaedic Oncology
Clinical Fellow

1996

New Jersey Medical School
Newark, New Jersey
Orthopaedic Research Fellow

1995

Mount Sinai School of Medicine
New York, New York
Orthopaedic Research Fellow

Residency

1992-1997

New Jersey Medical School
Newark, New Jersey
Department of Orthopaedic Surgery

1987-1992

Seoul National University Hospital
Seoul, Korea
Department of Orthopaedic Surgery

Graduate

1993

Seoul National University
Orthopaedic Science
Seoul, Korea
M.S., Ph.D.

Medical School

1986

Seoul National University
Seoul, Korea
M.D.

Undergraduate

1982

Seoul National University

Seoul, Korea

B.S.

CURRENT HOSPITAL AND ACADEMIC APPOINTMENTS

- 08/01/1999- 07/31/05
Assistant Professor
Department of Orthopaedic Surgery
Columbia University, New York
- 08/01/1999 - Present
Chief of Tumor and Bone Disease Service
Department of Orthopaedic Surgery
Columbia University, New York
- 09/01/2003 - Present
Director of Center for Orthopaedic Research
Department of Orthopaedic Surgery
Columbia University, New York
- 08/01/2006 - Present
Associate Professor of Clinical Orthopaedic Surgery
Columbia University, New York
- 07/01/2007 - Present
Vice Chairman for Research
Department of Orthopaedic Surgery
Columbia University, New York

PROFESSIONAL ORGANIZATIONS AND SOCIETIES

- Grant Reviewer, NIH Skeletal Biology and Skeletal Regeneration Study Section (2007)
- AAOS Leadership Fellow (2007 to Present)
- Grant Reviewer, Musculoskeletal Transplantation Foundation (2006 to Present)
- Grant Reviewer, Orthopaedic Research and Education Foundation (2006 to Present)
- Member, American Orthopaedic Association (2006 to Present)
- Member, American Academy of Orthopaedic Surgeon, Evaluation Committee (2005 to Present)
- Member, American Academy of Orthopaedic Surgeon, Basic Science Evaluation Subcommittee / Basic Science Committee for Orthopaedic In-Training Examination (2004 to Present)
- Musculoskeletal Tumor Society , U.S.A. (2003 -)
- Member, American Academy of Orthopaedic Surgeons (2001 to Present)
- American Medical Association
- Member, Orthopaedic Research Society (1997 to Present)

- American Society for Bone and Mineral Research
- Irving Comprehensive Cancer Center
- New York Academy of Medicine
- Member, New York Academy of Science (1996 to Present)
- International Bone and Mineral Society
- American Academy of Orthopaedic Surgery, Basic Science Evaluation Subcommittee

RECENT HONORS

- 2006-2009 Orthopaedic Research and Education Foundation Career Development Award
- American Academy of Orthopaedic Surgeons Osteolysis and Implant Wear Symposium Young Investigator Traveling Award (Nov 9-11, 2007)
- American Academy of Orthopaedic Surgeons Leadership Fellow, 2007
- Musculoskeletal Transplant Foundation Research Grant Reviewer
- 2006-2008 Orthopaedic Research and Education Foundation Research Grant Reviewer
- SNUMC Alumni Association HamChun Award, 2005
- Orthopaedic Research and Education Foundation Research Grant Award, 2004-2006
- 2004-2005 American Academy of Orthopaedic Surgeons / Orthopaedic Research and Education Foundation Clinician Scientist Traveling Award
- 2004-2005 Aircast Foundation Research Grant Award
- 2002 American Cancer Society /Irving Cancer Center Pilot Research Award
- Best Specialty Society Paper at the American Academy of Orthopaedic Surgeons, 2001
- Start-up Research Grant Award, Hospital for Sick Children, Toronto, Canada, 1999
- National Orthopaedic Surgery Research Fellow Foundation, 1998
- Annual Resident Research Award, New Jersey Medical School, 1997
- Young Investigator Award, 5th Biennial International Society for Fracture Repair, 1996
- American Fracture Association, Resident Research Grant, 1996
- American Orthopaedic Association-Zimmer Resident Travel Award, 1996
- American Fracture Association, Resident Research Award, 1996
- OREF Resident Research Award, 1995
- Who's Who in Science, New Jersey, U.S.A., 1999.
- Dictionary of International Biography, 27th Edition, Cambridge, England, 1999
- Outstanding People of the 20th Century

RESEARCH GRANTS AND AWARDS

Present Research Support (Principal Investigator: Francis Y. Lee, MD)

- Orthopaedic Research and Education Foundation Grant
Role: Principal Investigator
Career Development Award (Peer-Reviewed)
Period: July 1st, 2006 - June 30th, 2009

- National Institute of Health (NIH)
Role: Principal Investigator
National Institute of Biomedical Imaging and Biomedical Engineering (NIBIB)
NIH R01EB006834-01
Title: Mechanobiological Mechanism of Inflammatory Bone Loss
Period: June 1st, 2007 to May 31st, 2011
- Columbia University Venture Fund
Role: Principal Investigator
Title: Innovative Sarcoma Research (Stem Cell-based Delivery of siRNA to Sarcoma Cells)
Period: January 1st, 2007 to December 31st, 2007
- Unrestricted Research Grant (Donor: David E. Shaw, Ph.D)
Role: Principal Investigator
Period: November 25, 2005 to Present
- Orthopaedic Research and Education Foundation Grant
Role: Mentor (Co-PI)
Resident Research Grant (PI: Sam K. Cho, M.D., Orthopaedic Resident)
Title: The role of ERK signaling in titanium-induced inflammatory bone loss
Period: July 1st, 2007 to June 30th, 2008
- Orthopaedic Science Research Foundation (OSRF)
Role: Principal Investigator
Title: In vivo Biomolecular Imaging Core Grant
Period: July 1st, 2007 to June 30th, 2008

Past Research Support (Principal Investigator: Francis Y. Lee, MD)

Orthopaedic Research & Education Foundation
Role: Principal Investigator
Resident Research Award / Research Grant (Peer-Reviewed)
Title: The fate of chondrocyte during fracture healing
Period: January 1st, 1995 to December 31st, 1995

American Fracture Association
Role: Principal Investigator
Title: The effect of nicotine on fracture healing
Period: July 1st, 1996 to December 31st, 2006

National Orthopaedic Surgery Fellowship Foundation
Role: Principal Investigator
Title: The effect of rhBMP-2 on allograft fracture repair
Period: January 1st, 1998 to June 30th, 1998

Hospital for Sick Children Start-up Research Grant
Role: Principal Investigator
Title: Vitamin D3 pathway activation in chondrosarcoma
Period: January 1st, 1999 to June 30th, 1999

American Cancer Society Pilot Award
Role: Principal Investigator
Title: Molecular Pathways in Cartilage Tumors
Period: January 1st, 2002 to December 31st, 2002

Woman-at-Risk, Breast Cancer Program
Role: Principal Investigator
Title: Molecular mechanisms of osteolytic metastatic breast cancer
Period: July 1st, 2002 to June 30th, 2003

Howmedica, Rutherford, NJ
Role: Principal Investigator
Title: Developing Novel Implants
Period: January 1st, 2003 to June 30th, 2004

Aircast Foundation Research Grant
Role: Principal Investigator
Title: Targeting Cell Survival Genes of Chondrosarcoma (Peer Reviewed)
Period: January 1st, 2005 to December 31st, 2006

Musculoskeletal Transplant Foundation
Role: Principal Investigator
Title: The Beneficial Effect of Topical Bisphosphonate on Trabecular Bone Allograft
Period: Jan 1, 2005 to Dec 31, 2005

Orthopaedic Research and Education Foundation
Role: Principal Investigator
Title: SDF-1 Regulation in Osteoclastogenesis
Period: July 1, 2004-June 30, 2006

TissueGene, Inc., Gaithersburg, MD
Role: Principal Investigator
Sponsored Research Grant through Columbia University
Title: Gene Expression Profiling of Cartilage
Period: 2003-2006

Orthopaedic Research and Education Foundation Grant
Role: Mentor
Resident Research Grant (PI: Sanjeev Suratwala, M.D., Orthopaedic Resident)
Title: The role of topical bisphosphonate on orthopaedic implants

Period: Jan 1st, 2006 to June 30th, 2006

Orthopaedic Research and Education Foundation Grant
Role: Mentor
Resident Research Grant (PI: Steve Storer, M.D., Orthopaedic Resident)

Title: The role of bisphosphonate on allograft bone healing

Period: Jan 1st, 2004 to June 30th, 2004

Orthopaedic Science Research Foundation

Role: Center Director

Center for Orthopaedic Research Infrastructure Grant

Period: 2004 to 2006

PEER-REVIEWED PUBLICATIONS (In Chronological Order)

CLINICAL STUDIES

- Seo, S.; Adelmir, A.; Minematsu, H.; and Lee, F.: ERK SIGNALING REGULATES M-CSF EXPRESSION INDUCED BY TITANIUM NANOPARTICLES IN MC3T3-E1 MURINE CALVARIAL PRE-OSTEOBLASTIC CELLS. *Ann N Y Acad Sci*, (In Press), 2007.
- Minematsu, H.; Seo, S.; Adelmir, A.; and Lee, F.: CALCINEURIN/NFATC1 AXIS REGULATES UHMWPE WEAR PARTICLE-INDUCED CYTOKINE EXPRESSION IN MACROPHAGES. *Ann N Y Acad Sci*, (In Press) 2007.
- Lowenstein, J. E.; Matsumoto, H.; Vitale, M. G.; Weidenbaum, M.; Gomez, J. A.; Lee, F. Y.; Hyman, J. E.; and Roye, D. P., Jr.: Coronal and sagittal plane correction in adolescent idiopathic scoliosis: a comparison between all pedicle screw versus hybrid thoracic hook lumbar screw constructs. *Spine*, 32(4): 448-52, 2007.
- Kim, D. W.; Seo, S. W.; Cho, S. K.; Chang, S. S.; Lee, H. W.; Lee, S. E.; Block, J. A.; Hei, T. K.; and Lee, F. Y.: Targeting of cell survival genes using small interfering RNAs (siRNAs) enhances radiosensitivity of Grade II chondrosarcoma cells. *J Orthop Res*, 25(6): 820-8, 2007.
- Adelmir, A.; Kim, D.; and Lee, F.: Calcineurin/NFATc axis mediated fluid shear stress-induced COX-2 expression in human mesenchymal cells. *Ann N Y Acad Sci*, [Epub ahead of print], 2007.
- Vitale, M. A.; Choe, J. C.; Sesko, A. M.; Hyman, J. E.; Lee, F. Y.; Roye, D. P., Jr.; and Vitale, M. G.: The effect of limb length discrepancy on health-related quality of life: is the '2 cm rule' appropriate? *J Pediatr Orthop B*, 15(1): 1-5, 2006.
- Lee, F. Y.; Sinicropi, S. M.; Lee, F. S.; Vitale, M. G.; Roye, D. P., Jr.; and Choi, I. H.: Treatment of congenital pseudarthrosis of the tibia with recombinant human bone morphogenetic protein-7 (rhBMP-7). A report of five cases. *J Bone Joint Surg Am*, 88(3): 627-33, 2006.
- Kim, Y. S.; Bigliani, L. U.; Fujisawa, M.; Murakami, K.; Chang, S. S.; Lee, H. J.; Lee, F. Y.; and Blaine, T. A.: Stromal cell-derived factor 1 (SDF-1, CXCL12) is increased in subacromial bursitis and downregulated by steroid and nonsteroidal anti-inflammatory agents. *J Orthop Res*, 24(8): 1756-64, 2006.
- Kim, D. W. et al.: Mechanical loading differentially regulates membrane-bound and soluble RANKL availability in MC3T3-E1 cells. *Ann N Y Acad Sci*, 1068: 568-72, 2006.
- Yu, J.; Chang, S. S.; Suratwala, S.; Chung, W. S.; Abdelmessieh, P.; Lee, H. J.; Yang, J.; and Lee, F. Y.: Zoledronate induces apoptosis in cells from fibro-cellular membrane of unicameral bone cyst (UBC). *J Orthop Res*, 23(5): 1004-12, 2005.

- Yoon, A. J.; Parisien, M.; Feldman, F.; and Young-In Lee, F.: Extranodal Rosai-Dorfman disease of bone, subcutaneous tissue and paranasal sinus mucosa with a review of its pathogenesis. *Skeletal Radiol*, 34(10): 653-7, 2005.
- Vitale, M. G.; Roye, E. A.; Choe, J. C.; Hyman, J. E.; Lee, F. Y.; and Roye, D. P., Jr.: Assessment of health status in patients with cerebral palsy: what is the role of quality-of-life measures? *J Pediatr Orthop*, 25(6): 792-7, 2005.
- Vitale, M. G.; Choe, J. C.; Vitale, M. A.; Lee, F. Y.; Hyman, J. E.; and Roye, D. P., Jr.: Patient-based outcomes following clubfoot surgery: a 16-year follow-up study. *J Pediatr Orthop*, 25(4): 533-8, 2005.
- Storer, S. K.; Vitale, M. G.; Hyman, J. E.; Lee, F. Y.; Choe, J. C.; and Roye, D. P., Jr.: Correction of adolescent idiopathic scoliosis using thoracic pedicle screw fixation versus hook constructs. *J Pediatr Orthop*, 25(4): 415-9, 2005.
- Liao, T. S. et al.: Recruitment of osteoclast precursors by stromal cell derived factor-1 (SDF-1) in giant cell tumor of bone. *J Orthop Res*, 23(1): 203-9, 2005.
- Lee, F. Y.; Schoeb, J. S.; Yu, J.; Christiansen, B. D.; and Dick, H. M.: Operative lengthening of the humerus: indications, benefits, and complications. *J Pediatr Orthop*, 25(5): 613-6, 2005.
- Lee, F. Y. et al.: mu-Calpain regulates receptor activator of NF-kappaB ligand (RANKL)-supported osteoclastogenesis via NF-kappaB activation in RAW 264.7 cells. *J Biol Chem*, 280(33): 29929-36, 2005.
- Blaine, T. A. et al.: The molecular pathophysiology of subacromial bursitis in rotator cuff disease. *J Shoulder Elbow Surg*, 14(1 Suppl S): 84S-89S, 2005.
- Young-In Lee, F.; Hornicek, F. J.; Dick, H. M.; and Mankin, H. J.: Synovial chondromatosis of the foot. *Clin Orthop Relat Res*, (423): 186-90, 2004.
- Ugwonal, O. F.; Lomas, G.; Choe, J. C.; Hyman, J. E.; Lee, F. Y.; Vitale, M. G.; and Roye, D. P., Jr.: Effect of bracing on the quality of life of adolescents with idiopathic scoliosis. *Spine J*, 4(3): 254-60, 2004.
- Roposch, A.; Bhaskar, A. R.; Lee, F.; Adedapo, S.; Mousny, M.; and Alman, B. A.: Orthopaedic manifestations of Brachmann-de Lange syndrome: a report of 34 patients. *J Pediatr Orthop B*, 13(2): 118-22, 2004.
- Lee, F. Y.; Yu, J.; Chang, S. S.; Fawwaz, R.; and Parisien, M. V.: Diagnostic value and limitations of fluorine-18 fluorodeoxyglucose positron emission tomography for cartilaginous tumors of bone. *J Bone Joint Surg Am*, 86-A(12): 2677-85, 2004.
- Delloye, C.; Suratwala, S. J.; Cornu, O.; and Lee, F. Y.: Treatment of allograft nonunions with recombinant human bone morphogenetic proteins (rhBMP). *Acta Orthop Belg*, 70(6): 591-7, 2004.
- Chang, S. S.; Suratwala, S. J.; Jung, K. M.; Doppelt, J. D.; Zhang, H. Z.; Blaine, T. A.; Kim, T. W.; Winchester, R. J.; and Lee, F. Y.: Bisphosphonates may reduce recurrence in giant cell tumor by inducing apoptosis. *Clin Orthop Relat Res*, (426): 103-9, 2004.
- Vitale, M. G.; Choe, J. C.; Hwang, M. W.; Bauer, R. M.; Hyman, J. E.; Lee, F. Y.; and Roye, D. P., Jr.: Use of ketorolac tromethamine in children undergoing scoliosis surgery. an analysis of complications. *Spine J*, 3(1): 55-62, 2003.
- Lee, F. Y., and Chapman, C. B.: In situ pinning of hip for stable slipped capital femoral epiphysis on a radiolucent operating table. *J Pediatr Orthop*, 23(1): 27-9, 2003.
- Osgood, G. M.; Lee, F. Y.; Parisien, M. V.; and Ruzal-Shapiro, C.: Magnetic resonance imaging depiction of tight iliotibial band in melorheostosis associated

- with severe external rotation deformity, limb shortening and patellar dislocation in planning surgical correction. *Skeletal Radiol*, 31(1): 49-52, 2002.
- Lee, F. Y.; Zawadsky, M.; Parisien, M.; Ho, M.; Murty, V. V.; Jayaraman, T.; and Dick, H. M.: Novel translocation (9;12)(q22;q24) in secondary chondrosarcoma arising from hereditary multiple exostosis. *Cancer Genet Cytogenet*, 132(1): 68-70, 2002.
 - Lee, F. Y.; Storer, S.; Hazan, E. J.; Gebhardt, M. C.; and Mankin, H. J.: Repair of bone allograft fracture using bone morphogenetic protein-2. *Clin Orthop Relat Res*, (397): 119-26, 2002.
 - Patari, S. K.; Lee, F. Y.; and Behrens, F. F.: Coronal split fracture of the proximal tibia epiphysis through a partially closed physis: a new fracture pattern. *J Pediatr Orthop*, 21(4): 451-5, 2001.
 - Lee, F.; Keel, S. B.; Gebhardt, M. C.; and Rosenthal, D. I.: Intra-articular lipoma with osteochondroid metaplasia in the knee joint. *Skeletal Radiol*, 30(4): 230-3, 2001.
 - Ahmad, C. S., and Lee, F. Y.: An all-arthroscopic soft-tissue balancing technique for lateral patellar instability. *Arthroscopy*, 17(5): 555-7, 2001.
 - Ramappa, A. J.; Lee, F. Y.; Tang, P.; Carlson, J. R.; Gebhardt, M. C.; and Mankin, H. J.: Chondroblastoma of bone. *J Bone Joint Surg Am*, 82-A(8): 1140-5, 2000.
 - Margau, R.; Babyn, P.; Cole, W.; Smith, C.; and Lee, F.: MR imaging of simple bone cysts in children: not so simple. *Pediatr Radiol*, 30(8): 551-7, 2000.
 - Lee, F. Y.; Hazan, E. J.; Gebhardt, M. C.; and Mankin, H. J.: Experimental model for allograft incorporation and allograft fracture repair. *J Orthop Res*, 18(2): 303-6, 2000.
 - Lee, F. Y.; Montgomery, M.; Hazan, E. J.; Keel, S. B.; Mankin, H. J.; and Kattapuram, S.: Recurrent giant-cell tumor presenting as a soft-tissue mass. A report of four cases. *J Bone Joint Surg Am*, 81(5): 703-7, 1999.
 - Lee, F. Y.; Mankin, H. J.; Fondren, G.; Gebhardt, M. C.; Springfield, D. S.; Rosenberg, A. E.; and Jennings, L. C.: Chondrosarcoma of bone: an assessment of outcome. *J Bone Joint Surg Am*, 81(3): 326-38, 1999.
 - Lee, F. Y.; Rho, J. Y.; Harten, R., Jr.; Parsons, J. R.; and Behrens, F. F.: Micromechanical properties of epiphyseal trabecular bone and primary spongiosa around the physis: an in situ nanoindentation study. *J Pediatr Orthop*, 18(5): 582-5, 1998.
 - Lee, F. Y.; Hornicek, F. J.; Hazan, E. J.; Kloen, P.; Wolfe, M. A.; and Mankin, H. J.: Reconstruction of the shoulder joint using an acetabular allograft. A report of two cases. *Clin Orthop Relat Res*, (357): 116-21, 1998.
 - Lee, F. Y.; Gebhardt, M. C.; Keel, S. B.; and Rosenthal, D. I.: A discrete soft tissue mass in the distal thigh of a 29-year-old man. *Clin Orthop Relat Res*, (357): 247-50, 255-6, 1998
 - Lee, F. Y.; Choi, Y. W.; Behrens, F. F.; DeFouw, D. O.; and Einhorn, T. A.: Programmed removal of chondrocytes during endochondral fracture healing. *J Orthop Res*, 16(1): 144-50, 1998.
 - Benevenia, J.; Lee, F. Y.; Buechel, F.; and Parsons, J. R.: Pathologic supracondylar fracture due to osteolytic pseudotumor of knee following cementless total knee replacement. *J Biomed Mater Res*, 43(4): 473-7, 1998.
 - Harten, R. D., Jr.; Lee, F. Y.; Zimmerman, M. C.; Hurowitz, E.; Arakal, R.; and Behrens, F. F.: Regional and temporal changes in the acoustic properties of fracture callus in secondary bone healing. *J Orthop Res*, 15(4): 570-6, 1997.

- Seong, S. C.; Matsumura, T.; Lee, F. Y.; Whelan, M. C.; Li, X. Q.; and Trippel, S. B.: Insulin-like growth factor I regulation of Swarm rat chondrosarcoma chondrocytes in culture. *Exp Cell Res*, 211(2): 238-44, 1994.
- Kim, Y. M.; Lee, S. H.; Lee, F. Y.; Koo, K. H.; and Cho, K. H.: Morphologic and biomechanical study of avascular necrosis of the femoral head. *Orthopedics*, 14(10): 1111-6, 1991.

BOOKS AND CHAPTERS

- Carol Morris, Lee FY and Gebhardt MC. Benign Bone Tumors, Chapter, Operative Orthopaedic Surgery, Ed. Chapman M, Williams and Wilkins, 2000.
- Lee FY and Lee HK. Basic science in musculoskeletal tumor, Chapter, Musculoskeletal Oncology, Ed. Lee HK, 1996, Korea.
- Hyman J, Lee FY, Roye DP. Orthopaedic Surgery, Chapter, Pediatric Secrets, Ed, 200.
- Seo SW, F Remotti, Lee FY: Chondrosarcoma, Orthopaedic Knowledge Update, Musculoskeletal Oncology (In Press).
- Seo SW, Moon YL, Lee FY: Benign Cystic Lesions. Essentials of Orthopaedic Surgery, (In Preparation)

SELECTED PRESENTATIONS AND POSTERS (last 5 years)

- NFAT REGULATES LPS-INDUCED M-CSF EXPRESSION IN PRE-OSTEOBLASTIC CELLS. 53RD Annual Meeting of Orthopaedic Research Society, San Diego, 2007.
- CALCINEURIN/NFATC1 AXIS REGULATES UHMWPE WEAR PARTICLE-INDUCED CYTOKINE EXPRESSION IN BOTH PREOSTEOBLASTIC MC3T3-E1 CELLS AND RAW 264.7 CELLS. 53RD Annual Meeting of Orthopaedic Research Society, San Diego, 2007.
- NFAT AND ERK SIGNALING REGULATE M-CSF EXPRESSION INDUCED BY TITANIUM NANOPARTICLES IN MC3T3-E1 MURINE CALVARIAL PRE-OSTEOBLASTIC CELLS. 53RD Annual Meeting of Orthopaedic Research Society, San Diego, 2007.
- Kim, D W; Seo, S W; Ahn, J M; Lee, S E; Lee, H-J.; Lee, F Y: THE CALCINEURIN / NUCLEAR FACTOR OF ACTIVATED T CELL (NFAT) AXIS MEDIATES FLUID SHEAR STRESS-INDUCED COX-2 EXPRESSION IN MC3T3-E1 CELLS. 52ND Annual Meeting of Orthopaedic Research Society, Chicago, 2006.
- Kim, D W; Lee, S E; Seo, S W; Cho, S; Hei, T; Lee, F Y: DUAL SILENCING OF Bcl-2 and Bcl-XL GENES ENHANCES RADIOSENSITIVITY IN CHONDROSARCOMA. 52ND Annual Meeting of Orthopaedic Research Society, Chicago, 2006.
- Lee, H.-J., Kim, DW,*Kim, A., Tolchin, B., Ahn, JM, and Lee, FY: REGULATION OF THE RANKL/OPG RATIO BY FLUID SHEAR STRESS in MC3T3-E1 CELLS. 52ND Annual Meeting of Orthopaedic Research Society, Chicago, 2006.
- Suratwala, S J; Gardner, T R; Seo S W; Ahn J M; Park, S H; Yeh, J K; Lee, F Y: BISPHOSPHONATE/HYDROXYAPATITE COATED FEMORAL NAILS PRESERVE PERIPROSTHETIC BONE MASS AND EXHIBIT HIGHER

- FAILURE LOAD IN A RODENT OSTEOLYSIS MODEL. 52ND Annual Meeting of Orthopaedic Research Society, Chicago, 2006.
- Fujisawa M; Ankem HK; Moon YL; Minematsu H; Chang S-S; Lee HJ; Lee FY; Bigliani LU and Blaine TA: MECHANICAL STRAIN INDUCED ACTIVATION OF IL-6, COX-2 AND SDF-1 IN SUBACROMIAL BURSAL CELLS INVOLVES ERK (MAPK), P38, JNK AND NF-kb SIGNALING PATHWAYS. 52ND Annual Meeting of Orthopaedic Research Society, Chicago, 2006.
 - Fujisawa M; Ankem HK; Moon YL; Minematsu H; Chang S-S; Lee HJ; Lee FY; Bigliani LU and Blaine TA: MECHANICAL STRAIN INDUCES ACTIVATION OF INFLAMMATORY CYTOKINES IN SUBACROMIAL BURSAL CELLS: AN IN VITRO MODEL FOR SUBACROMIAL IMPINGEMENT. 52ND Annual Meeting of Orthopaedic Research Society, Chicago, 2006.
 - Tolchin BD; Birk DM; Chang SS; Chung W; Cho SK; Kwon A; Lee HJ; Lee FY: MECHANICAL LOADING ALTERS THE EXPRESSION OF OSTEOGENIC AND OSTEOCLASTOGENIC REGULATORS IN VITRO 51st Annual Meeting of Orthopaedic Research Society, 2005.
 - Karmin, J; Chang, S-S; Shrivastana, N; Lin S; Wang, D; Blaine, TA; Bigliani, LU; Lee FY; Lee, H-J: Small Interfering RNA (siRNA) Targeting Receptor for Advanced Glycation End Products (RAGE) Downregulates Stromal Cell Derived Factor 1 (SDF-1) in Rheumatoid Arthritis Cells. Annual Meeting of Orthopaedic Research Society, 2005.
 - Fujisawa M; Kim, Y-S; Murakami, K; Chang, S-S; Lee, H-J; Lee FY; Bigliani L; Blaine TA: EXPRESSION PROFILE OF MATRIX/ADHESION MOLECULES IN SUBACROMIAL BURSTITIS. 51st Annual Meeting of Orthopaedic Research Society, 2005.
 - Kim, D W; Abdelmessieh, P; Lin, S; Wang, D; Fujisawa M; Chang, S S; Lee, H J; Lee F Y: Neoplastic Chondrocytes of Chondrosarcoma Activate Bcl-2 Cell Survival Machinery and Inhibitors of Apoptosis Under Nutritional Deprivation. 51st Annual Meeting of Orthopaedic Research Society, 2005.
 - Hong, D; Chung, WS; Shrivastava, N; Bigliani, LU; Lee, FY; Lee HJ: CALPAIN IS A MEDIATOR OF RANKL INDUCED OSTEOCLASTOGENESIS OF MURINE MACROPHAGES IN VITRO. 51st Annual Meeting of Orthopaedic Research Society, 2005.
 - Fujisawa M, Kim Y-S, Murakami K, Abdelmessieh P, Chang, S-S, Lee, H-J, Blaine TA, and Lee FY; FUNCTION OF A HECT DOMAIN UBIQUITIN LIGASE IN OSTEOBLAST DIFFERENTIATION. 51st Annual Meeting of Orthopaedic Research Society, 2005.
 - Birk DM; Tolchin BD; Chang SS; Shrivastana N; Lee HJ; Blaine TA; Lee FY: The effect of mechanical strain on Osteoclastogenesis in RAW 264.7 Cells in Vitro. 51st Annual Meeting of Orthopaedic Research Society, 2005.
 - Kim YS, Lee HJ, Chang SS, Lee FY, Bigliani LU, Blaine TA: SDF-1 expression in shoulder bursitis. 51st Annual Meeting of Orthopaedic Research Society, 2005.
 - Suratwala, S; Sinicropi, S; Lee, H J; Lee, F S, Vitale, M G; Roye, D P; Choi, I H, Delloye, C; Lee FY: Recombinant Human Bone Morphogenetic Proteins Are Not Sufficient To Induce Healing in Difficult Human Nonunions. 51st Annual Meeting of Orthopaedic Research Society, 2005.
 - Suratwala S, Storer SK, Martin G, Yeh JK, Lee FY: THE EFFECT OF BISPHOSPHONATES ON ALLOGRAFT INCORPORATION. Annual Meeting of American Academy of Orthopaedic Surgeons, 2005

- Lee FY, Suratwala, S, Yu J: TREATMENT OF AGGRESSIVE OSTEOLYTIC BENIGN BONE LESIONS WITH TOPICAL ANTIRESORPTIVE AGENTS: SCIENTIFIC RATIONALE AND PRELIMINARY CLINICAL RESULTS. Musculoskeletal Tumor Society, 2004
- Delloy C, Suratwala S, Lee FY: LACK OF HEALING RESPONSE IN ALLOGRAFT SURGERIES. Musculoskeletal Tumor Society, 2004
- Lee FY et al: RECRUITMENT OF OSTEOCLAST PRECURSOR CELLS BY STROMAL CELL DERIVED FACTOR-1 IN GIANT CELL TUMOR OF BONE. 10th Workshop on Frontiers of Skeletal Biology, Davos, 2004.
- Lee FY, Suratwala, S, Yu J: TREATMENT OF AGGRESSIVE OSTEOLYTIC BENIGN BONE LESIONS WITH TOPICAL ANTIRESORPTIVE AGENTS: PART I. SCIENTIFIC RATIONALE. 10th Workshop on Frontiers of Skeletal Biology, Davos, 2004.
- Lee FY et al: TREATMENT OF AGGRESSIVE OSTEOLYTIC BENIGN BONE LESIONS WITH TOPICAL ANTIRESORPTIVE AGENTS: PART II. PRELIMINARY CLINICAL RESULTS. 10th Workshop on Frontiers of Skeletal Biology, Davos, 2004.
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