Stanford



Simon Chow

Sr Res Scientist-Basic Life, Orthopaedic Surgery

Bio

BIO

Simon Chow is the laboratory manager at the Goodman Lab who have obtained his MSc in Biomedical Engineering in 2009 and his PhD in Orthopaedics and Traumatology in 2014. He subsequently served as a Research Assistant Professor at the Department of Orthopaedic and Traumatology at the Chinese University of Hong Kong (CUHK) from 2016 to 2022. Simon has had extensive experience 2005 in musculoskeletal aging related to muscle and bone regeneration; establishment of animal models for orthopaedic research; the role of inflammation in bone regeneration. His expertise extends from in vitro, in vivo pre-clinical studies to surgical and community-based clinical studies with proven published track record.

CURRENT ROLE AT STANFORD

Laboratory Manager, Goodman Lab.

EDUCATION AND CERTIFICATIONS

- Postdoctoral Research Fellow, The Chinese University of Hong Kong , Orthopaedics and Traumatology (2016)
- PhD, The Chinese University of Hong Kong , Orthopaedics and Traumatology (2014)
- MSc, The Chinese University of Hong Kong , Biomedical Engineering (2009)
- BSc, University of Toronto , Human Biology (2002)

LINKS

- ORCID: https://orcid.org/0000-0003-1742-980X
- Google Scholar: https://scholar.google.com/citations?user=Am3jJMUAAAAJ&hl=en

Professional

WORK EXPERIENCE

- Research Assistant Professor - The Chinese University of Hong Kong (9/1/2016 - 8/31/2022)
- Postdoctoral Research Fellow - The Chinese University of Hong Kong. (9/1/2014 - 8/31/2016)
- Research Assistant - The Chinese University of Hong Kong (10/12/2005 - 8/31/2014)

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Editorial Board Member, Journal of Orthopaedic Research (2021 - present)
- Editorial Board Member, BMC Musculoskeletal Disorder (2023 - present)
- Editorial Board Member, Scientific Reports (2022 - present)

Publications

PUBLICATIONS

- **Enhanced Osteoinduction, Rheological and Mechanical Performance of 3D-Printed Methylcellulose-Gelatin-Hydroxyapatite Scaffolds.** *Journal of functional biomaterials*
  Yuksel, C., Chow, S. K., Hirose, R., Morita, M., Gao, Q., Igei, T., Thukkaram, M., Ma, C., Tam, T., Clarke, S., Scott, M. S., Goodman, S., Ege, et al
  2026; 17 (9)

- **Organ-on-chip bridging musculoskeletal disease modeling and precision therapeutic discovery.** *Trends in biotechnology*
  Gao, Q., Lee, M. L., Makarczyk, M., Chow, S. K., Bunnell, B. A., Lin, H., Goodman, S. B.
  2026

- **Corticosteroid-associated osteonecrosis in paediatric compared with adult patients: are they the same disease?** *Bone & joint open*
  Igei, T., Smith, G. B., Chow, S. K., Jobanputra, A., Khoo, B. W., Shea, K. G., Goodman, S. B.
  2026; 7 (5): 682-691

- **Immune profiling in orthopaedic diseases using mass cytometry : a narrative review of applications and future directions.** *Bone & joint research*
  Susuki, Y., Thukkaram, M., Shinohara, I., Murayama, M., Morita, M., Igei, T., Ma, C., Pius, A. K., Gao, Q., Chow, S. K., Goodman, S. B.
  2026; 15 (5): 497-507

- **A Novel Murine Model to Study the Early Biological Events of Corticosteroid-Associated Osteonecrosis of the Femoral Head.** *Bioengineering (Basel, Switzerland)*
  Shinohara, I., Susuki, Y., Chow, S. K., Cheung, P., Moses, A. S., Murayama, M., Morita, M., Uno, T., Gao, Q., Ma, C., Igei, T., Beinat, C., Goodman, et al
  2026; 13 (1)

- **The presence of persistent synovial inflammation after "Eradication" unmasks the "Unseen" dormant state of infection allowing the prediction of infection free survival in total joint replacements.** *Journal of translational medicine*
  Manasherob, R., Warren, S. I., Flanagan, C. M., Arora, P., Heo, L., Moore, C. J., Chow, S. K., Otieno-Ayayo, Z. N., Furukawa, D., Maloney, W. J., Lowenberg, D. W., Goodman, S. B., Amanatullah, et al
  2025; 23 (1): 1392

- **Targeting cellular senescence in progenitor cells as a strategy to enhance bone regeneration by cell therapies: a systematic review of pre-clinical investigations.** *Stem cell research & therapy*
  Morita, M., Damle, E. B., Shinohara, I., Murayama, M., Susuki, Y., Gao, Q., Ma, C., Chow, S. K., Goodman, S. B.
  2025; 16 (1): 669

- **Single-cell RNA sequencing reveals early cell dynamics of MSC-based therapy in long bone critical-size defects in mice** *JOURNAL OF ORTHOPAEDIC TRANSLATION*
  Zhang, N., Yuan, J., Li, X., Su, N., Wang, Y., Chen, S., Huang, E., Gao, Q., Yang, F., Chow, S., Goodman, S. B.
  2025; 55: 121-131

- **Can alternatives to animal testing yield useful information regarding biological mechanisms and drug discovery?** *Journal of orthopaedic translation*
  Gao, Q., Chow, S. K., Shinohara, I., Murayama, M., Susuki, Y., Morita, M., Ma, C., Goodman, S. B.
  2025; 55: 132-145

- **Single-cell RNA sequencing reveals early cell dynamics of MSC-based therapy in long bone critical-size defects in mice.** *Journal of orthopaedic translation*
  Zhang, N., Yuan, J., Li, X., Su, N., Wang, Y., Chen, S., Huang, E., Gao, Q., Yang, F., Chow, S. K., Goodman, S. B.
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- **Can alternatives to animal testing yield useful information regarding biological mechanisms and drug discovery?** *JOURNAL OF ORTHOPAEDIC TRANSLATION*
  Gao, Q., Chow, S., Shinohara, I., Murayama, M., Susuki, Y., Morita, M., Ma, C., Goodman, S. B.
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- **Demystifying Our Knowledge of Stem Cells and Progenitor Cells Part I: Basic Concepts Relevant to the Treatment of Osteonecrosis and Other Diseases of the Musculoskeletal System.** *The Journal of arthroplasty*

Goodman, S. B., Goodnough, L. H., Chow, S. K.
2025; 40 (8): 2136-2141

- **Establishment of Subtrochanteric Fracture in Pre-Clinical Animal Model.** *Orthopaedic surgery*
  Palanisamy, P., Chow, S. K., Li, S., Li, M. M., Cheung, W. H., Qin, L., Zheng, Y. P.
  2025
- **Orthobiologics for the Treatment of Osteonecrosis: The Need for a Prospective Randomized Clinical Trial** *REGENERATIVE ENGINEERING AND TRANSLATIONAL MEDICINE*
  Goodman, S. B., Rainey, J. P., Chow, S. K., Mont, M. A., Jones, L. P.
  2025
- **Metformin Modulates Oxidative Stress in Murine Mesenchymal Stem Cells In Vitro and Alleviates Corticosteroid-Induced Inflammation and Impairment of Bone Formation** *HSS JOURNAL*
  Shinohara, I., Susuki, Y., Murayama, M., Gao, Q., Cekuc, M., Ergul, Y., Morita, M., Pius, A. K., Ma, C., Chow, S., Goodman, S. B.
  2025
- **Metformin Modulates Oxidative Stress in Murine Mesenchymal Stem Cells In Vitro and Alleviates Corticosteroid-Induced Inflammation and Impairment of Bone Formation.** *HSS journal : the musculoskeletal journal of Hospital for Special Surgery*
  Shinohara, I., Susuki, Y., Murayama, M., Gao, Q., Cekuc, M. S., Ergul, Y. S., Morita, M., Pius, A. K., Ma, C., Chow, S. K., Goodman, S. B.
  2025: 15563316251351031
- **Optimization of Cytometry by Time-of-Flight Staining for Peripheral Blood and Bone Marrow Samples.** *Tissue engineering. Part C, Methods*
  Susuki, Y., Shinohara, I., Murayama, M., Morita, M., Ma, C., Pius, A. K., Gao, Q., Chow, S. K., Goodman, S. B.
  2025; 31 (7): 261-270
- **An Optimized Ex Vivo Protocol for Quantitative Electrophysiological Assessment of Neuromuscular Junctions and Skeletal Muscle Function Using the Aurora System.** *Bio-protocol*
  Cui, C., Bao, Z., Chow, S. K., Wang, Q., Chai, S., Xu, Z., Jiang, Q., Cheung, W. H.
  2025; 15 (12): e5353
- **The Role of Cell Therapies for the Treatment of Osteonecrosis of the Femoral Head.** *The Journal of arthroplasty*
  K-H Chow, S., Rainey, J. P., Mont, M. A., Jones, L. P., Goodman, S. B.
  2025
- **Comment on "Diagnosis of Sarcopenia by Evaluating Skeletal Muscle Mass by Adjusted Bioimpedance Analysis Validated With Dual-Energy X-Ray Absorptiometry" by Cheng et al.-The Authors Reply.** *Journal of cachexia, sarcopenia and muscle*
  Chow, S. K., Cheng, K. Y., Hung, V. W., Cheung, W. H.
  2025; 16 (3): e13865
- **Pathophysiology of the Effects of Oxidative Stress on the Skeletal System.** *Journal of orthopaedic research : official publication of the Orthopaedic Research Society*
  Shinohara, I., Morita, M., Chow, S. K., Murayama, M., Sususki, Y., Gao, Q., Goodman, S. B.
  2025
- **Macrophage phenotypes modulate neoangiogenesis and fibroblast profiles in synovial-like organoid cultures.** *Osteoarthritis and cartilage*
  Gao, Q., Zhang, X., Makarcyzk, M. J., Wong, L. E., Quig, M. S., Shinohara, I., Murayama, M., Chow, S. K., Bunnell, B. A., Lin, H., Goodman, S. B.
  2025
- **Low-Magnitude High-Frequency Vibration Attenuates Sarcopenia by Modulating Mitochondrial Quality Control via Inhibiting miR-378.** *Journal of cachexia, sarcopenia and muscle*
  Long, Y. F., Cui, C., Wang, Q., Xu, Z., Chow, S. K., Zhang, N., Wong, R. M., Chui, E. C., Schoenmehl, R., Brochhausen, C., Rubin, C., Li, G., Qin, et al
  2025; 16 (1): e13740
- **Characterization of LIPUS Parameters Suitable for Hip Bone Fracture.** *Ultrasound in medicine & biology*
  Palanisamy, P., Li, S., Shea, Q. T., Li, M. M., Cheung, W. H., Qin, L., Chow, S. K., Zheng, Y. P.
  2025
- **From Clinical to Benchside: Lacticaseibacillus and Faecalibacterium Are Positively Associated With Muscle Health and Alleviate Age-Related Muscle Disorder.** *Aging cell*

Liu, C., Wong, P. Y., Barua, N., Li, B., Wong, H. Y., Zhang, N., Chow, S. K., Wong, S. H., Yu, J., Ip, M., Cheung, W. H., Duque, G., Brochhausen, et al
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- **Personalized bone organoid using iPSC-derived cells for clinically relevant applications.** *Research square*
  Gao, Q., Teissier, V., Zhu, W., Makarcyzk, M. J., Shinohara, I., Murayama, M., Susuki, Y., Chow, S. K., Bunnell, B. A., Wu, J., Lin, H., Goodman, S. B.
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- **Metformin Modulates Cell Oxidative Stress to Mitigate Corticosteroid-Induced Suppression of Osteogenesis in a 3D Model.** *Journal of inflammation research*
  Cekuc, M. S., Ergul, Y. S., Pius, A. K., Meagan, M., Shinohara, I., Murayama, M., Susuki, Y., Ma, C., Morita, M., Chow, S. K., Bunnell, B. A., Lin, H., Gao, et al
  2024; 17: 10383-10396
- **3D Culture of MSCs for Clinical Application** *BIOENGINEERING-BASEL*
  Gao, Q., Cekuc, M., Ergul, Y., Pius, A. K., Shinohara, I., Murayama, M., Susuki, Y., Ma, C., Morita, M., Chow, S., Goodman, S. B.
  2024; 11 (12)
- **Quantification of Empty Lacunae in Tissue Sections of Osteonecrosis of the Femoral Head Using YOLOv8 Artificial Intelligence Model.** *Journal of biomedical materials research. Part B, Applied biomaterials*
  Shinohara, I., Inui, A., Murayama, M., Susuki, Y., Gao, Q., Chow, S. K., Mifune, Y., Matsumoto, T., Kuroda, R., Goodman, S. B.
  2024; 112 (12): e35512
- **3D Culture of MSCs for Clinical Application.** *Bioengineering (Basel, Switzerland)*
  Gao, Q., Cekuc, M. S., Ergul, Y. S., Pius, A. K., Shinohara, I., Murayama, M., Susuki, Y., Ma, C., Morita, M., Chow, S. K., Goodman, S. B.
  2024; 11 (12)
- **Leveraging AI models for lesion detection in osteonecrosis of the femoral head and T1-weighted MRI generation from radiographs.** *Journal of orthopaedic research : official publication of the Orthopaedic Research Society*
  Shinohara, I., Inui, A., Hwang, K., Murayama, M., Susuki, Y., Uno, T., Gao, Q., Morita, M., Chow, S. K., Tsubosaka, M., Mifune, Y., Matsumoto, T., Kuroda, et al
  2024
- **The Advantages and Shortcomings of Stem Cell Therapy for Enhanced Bone Healing** *TISSUE ENGINEERING PART C-METHODS*
  Chow, S., Gao, Q., Pius, A., Morita, M., Ergul, Y., Murayama, M., Shinohara, I., Cekuc, M., Ma, C., Susuki, Y., Goodman, S. B.
  2024; 30 (10): 415-430
- **The advantages and shortcomings of stem cell therapy for enhanced bone healing.** *Tissue engineering. Part C, Methods*
  Chow, S. K., Gao, Q., Pius, A., Morita, M., Ergul, Y. S., Murayama, M., Shinohara, I., Cekuc, M. S., Ma, C., Susuki, Y., Goodman, S. B.
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- **The interactions of macrophages, lymphocytes, and mesenchymal stem cells during bone regeneration.** *Bone & joint research*
  Murayama, M., Chow, S. K., Lee, M. L., Young, B., Ergul, Y. S., Shinohara, I., Susuki, Y., Toya, M., Gao, Q., Goodman, S. B.
  2024; 13 (9): 462-473
- **Identification of Osteosarcopenia by High-Resolution Peripheral Quantitative Computed Tomography.** *Journal of personalized medicine*
  Cheng, K. Y., Chow, S. K., Hung, V. W., Tsang, Z. T., Yip, B. H., Wong, R. M., Zhang, N., Qin, L., Law, S. W., Cheung, W. H.
  2024; 14 (9)
- **Harnessing immunomodulation to combat sarcopenia: current insights and possible approaches.** *Immunity & ageing : I & A*
  Zhang, N., Zhai, L., Wong, R. M., Cui, C., Law, S. W., Chow, S. K., Goodman, S. B., Cheung, W. H.
  2024; 21 (1): 55
- **T cells and macrophages jointly modulate osteogenesis of mesenchymal stromal cells.** *Journal of biomedical materials research. Part A*
  Murayama, M., Shinohara, I., Toya, M., Susuki, Y., Lee, M. L., Young, B., Gao, Q., Chow, S. K., Goodman, S. B.
  2024
- **Wnt/β-catenin signaling pathway as an important mediator in muscle and bone crosstalk: A systematic review.** *Journal of orthopaedic translation*
  Lin, W., Chow, S. K., Cui, C., Liu, C., Wang, Q., Chai, S., Wong, R. M., Zhang, N., Cheung, W. H.
  2024; 47: 63-73

- **Effects of physical exercise on neuromuscular junction degeneration during ageing: A systematic review.** *Journal of orthopaedic translation*
  Wang, Q., Cui, C., Zhang, N., Lin, W., Chai, S., Chow, S. K., Wong, R. M., Hu, Y., Law, S. W., Cheung, W. H.
  2024; 46: 91-102
- **Prevention of age-related neuromuscular junction degeneration in sarcopenia by low-magnitude high-frequency vibration.** *Aging cell*
  Bao, Z., Cui, C., Liu, C., Long, Y., Wong, R. M., Chai, S., Qin, L., Rubin, C., Yip, B. H., Xu, Z., Jiang, Q., Chow, S. K., Cheung, et al
  2024: e14156
- **Correction: Pius et al. Effects of Aging on Osteosynthesis at Bone-Implant Interfaces. Biomolecules 2024, 14, 52.** *Biomolecules*
  Pius, A. K., Toya, M., Gao, Q., Lee, M. L., Ergul, Y. S., Chow, S. K., Goodman, S. B.
  2024; 14 (3)
- **Sex differences of NF-κB-targeted therapy for mitigating osteoporosis associated with chronic inflammation of bone.** *Bone & joint research*
  Toya, M., Kushioka, J., Shen, H., Utsunomiya, T., Hirata, H., Tsubosaka, M., Gao, Q., Chow, S. K., Zhang, N., Goodman, S. B.
  2024; 13 (1): 28-39
- **Biophysical and nutritional combination treatment for myosteatosis in patients with sarcopenia: a study protocol for single-blinded randomised controlled trial.** *BMJ open*
  Li, M. C., Cheng, Y. K., Cui, C., Chow, S. K., Wong, R. M., Kwok, T. C., Siu, P. M., Yang, M., Tian, M., Rubin, C., Welch, A. A., Qin, L., Law, et al
  2024; 14 (1): e074858
- **Preclinical models for studying corticosteroid-induced osteonecrosis of the femoral head.** *Journal of biomedical materials research. Part B, Applied biomaterials*
  Tsubosaka, M., Maruyama, M., Lui, E., Kushioka, J., Toya, M., Gao, Q., Shen, H., Li, X., Chow, S. K., Zhang, N., Yang, Y. P., Goodman, S. B.
  2024; 112 (1): e35360
- **Preclinical models for studying corticosteroid-induced osteonecrosis of the femoral head** *JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS*
  Tsubosaka, M., Maruyama, M., Lui, E., Kushioka, J., Toya, M., Gao, Q., Shen, H., Li, X., Chow, S., Zhang, N., Yang, Y., Goodman, S. B.
  2024; 112 (1)
- **Effects of Aging on Osteosynthesis at Bone-Implant Interfaces.** *Biomolecules*
  Pius, A. K., Toya, M., Gao, Q., Ergul, Y. S., Chow, S. K., Goodman, S. B.
  2023; 14 (1)
- **C-C Motif Chemokine Ligand 2 Enhances Macrophage Chemotaxis, Osteogenesis, and Angiogenesis during the Inflammatory Phase of Bone Regeneration.** *Biomolecules*
  Shinohara, I., Tsubosaka, M., Toya, M., Lee, M. L., Kushioka, J., Murayama, M., Gao, Q., Li, X., Zhang, N., Chow, S. K., Matsumoto, T., Kuroda, R., Goodman, et al
  2023; 13 (11)
- **Does Exercise Influence Skeletal Muscle by Modulating Mitochondrial Functions via Regulating MicroRNAs? A Systematic Review.** *Ageing research reviews*
  Long, Y. F., Chow, S. K., Cui, C., Wong, R. M., Zhang, N., Qin, L., Law, S. W., Cheung, W. H.
  2023: 102048
- **Glycolytic reprogramming in macrophages and MSCs during inflammation.** *Frontiers in immunology*
  Li, X., Shen, H., Zhang, M., Teissier, V., Huang, E. E., Gao, Q., Tsubosaka, M., Toya, M., Kushioka, J., Maduka, C. V., Contag, C. H., Chow, S. K., Zhang, et al
  2023; 14: 1199751
- **Vibration Therapy as an Intervention for Enhancing Trochanteric Hip Fracture Healing in Elderly Patients: A Randomized Double-Blinded, Placebo-Controlled Clinical Trial**
  Wong, R., Chung, Y., Wong, H., Wong, P., Tang, N., Tso, C., Griffith, J., Liu, W., Ng, R., Chow, S., Cheung, W.
  MARY ANN LIEBERT, INC.2023
- **Hydrogel Delivery of Liposomal-Vancomycin and DNase I to Eradicate Fracture-related Methicillin-resistant Staphylococcus aureus Infection and Support Osteoporotic Fracture Healing**
  Wong, R., Li, J., Chung, Y., Ip, M., Rupp, M., Alt, V., Yee, S., Leung, S., Chui, C., Chow, S., Cheung, W.
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- **CCL2 promotes osteogenesis by facilitating macrophage migration during acute inflammation.** *Frontiers in cell and developmental biology*
  Toya, M., Zhang, N., Tsubosaka, M., Kushioka, J., Gao, Q., Li, X., Chow, S. K., Goodman, S. B.
  2023; 11: 1213641

- **Bone regeneration in inflammation with aging and cell-based immunomodulatory therapy.** *Inflammation and regeneration*
  Kushioka, J., Chow, S. K., Toya, M., Tsubosaka, M., Shen, H., Gao, Q., Li, X., Zhang, N., Goodman, S. B.
  2023; 43 (1): 29

- **Sarcopenia and Ageing.** *Sub-cellular biochemistry*
  Cheng, K. Y., Bao, Z., Long, Y., Liu, C., Huang, T., Cui, C., Chow, S. K., Wong, R. M., Cheung, W. H.
  2023; 103: 95-120

- **Hydrogel Delivery of DNase I and Liposomal Vancomycin to Eradicate Fracture-related Methicillin-resistant Staphylococcus aureus Infection and Support Osteoporotic Fracture Healing.** *Acta biomaterialia*
  Li, J., Leung, S. Y., Chung, Y. L., Chow, S. K., Alt, V., Rupp, M., Brochausen, C., Chui, C. S., Ip, M., Cheung, W. H., Wong, R. M.
  2023

- **The role of obesity in sarcopenia and the optimal body composition to prevent against sarcopenia and obesity.** *Frontiers in endocrinology*
  Liu, C., Cheng, K. Y., Tong, X., Cheung, W. H., Chow, S. K., Law, S. W., Wong, R. M.
  2023; 14: 1077255

- **Deciphering the "obesity paradox" in the elderly: A systematic review and meta-analysis of sarcopenic obesity.** *Obesity reviews : an official journal of the International Association for the Study of Obesity*
  Liu, C., Wong, P. Y., Chung, Y. L., Chow, S. K., Cheung, W. H., Law, S. W., Chan, J. C., Wong, R. M.
  2023; 24 (2): e13534

- **Does the regulation of skeletal muscle influence cognitive function? A scoping review of pre-clinical evidence.** *Journal of orthopaedic translation*
  Liu, C., Wong, P. Y., Chow, S. K., Cheung, W. H., Wong, R. M.
  2023; 38: 76-83

- **The imminent risk of a fracture-existing worldwide data: a systematic review and meta-analysis.** *Osteoporosis international : a journal established as result of cooperation between the European Foundation for Osteoporosis and the National Osteoporosis Foundation of the USA*
  Wong, R. M., Wong, P. Y., Liu, C., Wong, H. W., Chung, Y. L., Chow, S. K., Law, S. W., Cheung, W. H.
  2022; 33 (12): 2453-2466

- **Recommendations on the post-acute management of the osteoporotic fracture - Patients with "very-high" Re-fracture risk.** *Journal of orthopaedic translation*
  Wong, R. M., Cheung, W. H., Chow, S. K., Ng, R. W., Li, W., Hsu, A. Y., Wong, K. K., Ho, A. W., Choi, S. H., Fang, C. X., Chan, C. F., Leung, K. H., Chu, et al
  2022; 37: 94-99

- **Coapplication of Magnesium Supplementation and Vibration Modulate Macrophage Polarization to Attenuate Sarcopenic Muscle Atrophy through PI3K/Akt/mTOR Signaling Pathway.** *International journal of molecular sciences*
  Cui, C., Bao, Z., Chow, S. K., Wong, R. M., Welch, A., Qin, L., Cheung, W. H.
  2022; 23 (21)

- **Current therapeutic interventions combating biofilm-related infections in orthopaedics : a systematic review of in vivo animal studies.** *Bone & joint research*
  Li, J., Cheung, W. H., Chow, S. K., Ip, M., Leung, S. Y., Wong, R. M.
  2022; 11 (10): 700-714

- **Modulating macrophage polarization for the enhancement of fracture healing, a systematic review.** *Journal of orthopaedic translation*
  Chow, S. K., Wong, C. H., Cui, C., Li, M. M., Wong, R. M., Cheung, W. H.
  2022; 36: 83-90

- **Regulation of mitochondrial dynamic equilibrium by physical exercise in sarcopenia: A systematic review.** *Journal of orthopaedic translation*
  Long, Y. F., Chow, S. K., Cui, C., Wong, R. M., Qin, L., Law, S. W., Cheung, W. H.
  2022; 35: 37-52

- **Osteocyte-specific dentin matrix protein 1 : the role of mineralization regulation in low-magnitude high-frequency vibration enhanced osteoporotic fracture healing.** *Bone & joint research*
  Li, M. C., Chow, S. K., Wong, R. M., Chen, B., Cheng, J. C., Qin, L., Cheung, W. H.
  2022; 11 (7): 465-476
- **Montreal cognitive assessment (MoCA) is highly correlated with 1-year mortality in hip fracture patients** *OSTEOPOROSIS INTERNATIONAL*
  Wong, R. Y., Ng, R. K., Chau, W. W., Liu, W. H., Chow, S. H., Tso, C. Y., Tang, N., Cheung, W.
  2022; 33 (10): 2185-2192
- **HR-pQCT for the Evaluation of Muscle Quality and Intramuscular Fat Infiltration in Ageing Skeletal Muscle** *JOURNAL OF PERSONALIZED MEDICINE*
  Chow, S., van Mourik, M., Hung, V., Zhang, N., Li, M., Wong, R., Leung, K., Cheung, W.
  2022; 12 (6)
- **Effects of Whole-Body Vibration Therapy on Knee Osteoarthritis: A Systematic Review and Meta-Analysis of Randomized Controlled Trials.** *Journal of rehabilitation medicine*
  Qiu, C. G., Chui, C. S., Chow, S. K., Cheung, W. H., Wong, R. M.
  2022; 54: jrm00266
- **High Charlson Comorbidity Index Score is associated with early fracture-related complication for internal fixation of neck of femur fractures.** *Scientific reports*
  Wong, R. M., Zu, Y., Chau, W. W., Tso, C. Y., Liu, W. H., Ng, R. W., Chow, S. K., Cheung, W. H., Tang, N., Ho, K. K.
  2022; 12 (1): 4749
- **Low-Intensity Pulsed Ultrasound Stimulation for Bone Fractures Healing: A Review.** *Journal of ultrasound in medicine : official journal of the American Institute of Ultrasound in Medicine*
  Palanisamy, P., Alam, M., Li, S., Chow, S. K., Zheng, Y. P.
  2022; 41 (3): 547-563
- **Fracture-related infection in osteoporotic bone causes more severe infection and further delays healing.** *Bone & joint research*
  Li, J., Wong, R. M., Chung, Y. L., Leung, S. S., Chow, S. K., Ip, M., Cheung, W. H.
  2022; 11 (2): 49-60
- **Muscle plays a more superior role than fat in bone homeostasis: A cross-sectional study of old Asian people.** *Frontiers in endocrinology*
  Liu, C., Wong, P. Y., Tong, X., Chow, S. K., Hung, V. W., Cheung, W. H., Qin, L., Law, S. W., Wong, R. M.
  2022; 13: 990442
- **Vibration therapy as an intervention for enhancing trochanteric hip fracture healing in elderly patients: a randomized double-blinded, placebo-controlled clinical trial.** *Trials*
  Wong, R. M., Chow, S. K., Tang, N., Chung, Y. L., Griffith, J., Liu, W. H., Ng, R. W., Tso, C. Y., Cheung, W. H.
  2021; 22 (1): 878
- **3D printing in orthopaedic surgery: a scoping review of randomized controlled trials.** *Bone & joint research*
  Wong, R. M., Wong, P. Y., Liu, C., Chung, Y. L., Wong, K. C., Tso, C. Y., Chow, S. K., Cheung, W. H., Yung, P. S., Chui, C. S., Law, S. W.
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