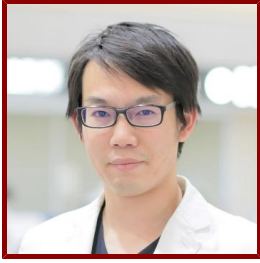


Stanford



Junichi Kushioka

Postdoctoral Research Fellow, Orthopedic Surgery

Bio

HONORS AND AWARDS

- The 33rd Basic Award, Japanese Society for Spine Surgery and Related Research
- Postdoctoral Fellowship, The Uehara Memorial Foundation
- The 39th Young Researcher Award, Japanese Society for Bone Morphometry
- 2017 Research Grant, Kaken Pharmaceutical CO., LTD. Award, Japan Orthopaedics and Traumatology Foundation Research Inc. (JOTF)
- The 10th Best Presentation Award, Japanese Association for the Study of Musculoskeletal Pain
- Fellowship, The Konishi Foundation
- Fellowship, The Nakatomi Foundation
- Fellowship, The Watanabe Foundation
- Fellowship, Kanzawa Medical Research Foundation
- 2017 International fellowship, Public Interest Incorporated group corporation, Medical Promotion “Ichokai”

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Osaka University (2020)
- Doctor of Medicine, Osaka University (2011)
- Board Certification, Japanese Board of Orthopaedic Surgery (2019)
- Fellowship, Osaka University Hospital (Osaka, JAPAN) , Orthopaedic Surgery (2016)
- Ph.D., Osaka University Graduate School of Medicine (Osaka, JAPAN) (2020)
- M.D., Osaka University, Medical School (Osaka, JAPAN) (2011)

STANFORD ADVISORS

- Stuart Goodman, Postdoctoral Faculty Sponsor
- Stuart Goodman, Postdoctoral Research Mentor

Publications

PUBLICATIONS

- **Amine modification of calcium phosphate by low-pressure plasma for bone regeneration.** *Scientific reports*
Kodama, J., Harunningtyas, A. A., Ito, T., Michlicek, M., Sugimoto, S., Kita, H., Chijimatsu, R., Ukon, Y., Kushioka, J., Okada, R., Kamatani, T., Hashimoto, K., Tateiwa, et al
2021; 11 (1): 17870

- **A novel BMP-2-loaded hydroxyapatite/beta-tricalcium phosphate microsphere/hydrogel composite for bone regeneration.** *Scientific reports*
Tateiwa, D., Nakagawa, S., Tsukazaki, H., Okada, R., Kodama, J., Kushioka, J., Bal, Z., Ukon, Y., Hirai, H., Kaito, T.
2021; 11 (1): 16924
- **Low magnetic field promotes recombinant human BMP-2-induced bone formation and influences orientation of trabeculae and bone marrow-derived stromal cells.** *Bone reports*
Okada, R., Yamato, K., Kawakami, M., Kodama, J., Kushioka, J., Tateiwa, D., Ukon, Y., Zeynep, B., Ishimoto, T., Nakano, T., Yoshikawa, H., Kaito, T.
2021; 14: 100757
- **Antibacterial efficacy of quaternized chitosan coating on 3D printed titanium cage in rat intervertebral disc space.** *The spine journal : official journal of the North American Spine Society*
Kodama, J., Chen, H., Zhou, T., Kushioka, J., Okada, R., Tsukazaki, H., Tateiwa, D., Nakagawa, S., Ukon, Y., Bal, Z., Tian, H., Zhao, J., Kaito, et al
2021
- **A novel nano-hydroxyapatite/synthetic polymer/bone morphogenetic protein-2 composite for efficient bone regeneration.** *The spine journal : official journal of the North American Spine Society*
Bal, Z., Korkusuz, F., Ishiguro, H., Okada, R., Kushioka, J., Chijimatsu, R., Kodama, J., Tateiwa, D., Ukon, Y., Nakagawa, S., Dede, E. C., Gizer, M., Korkusuz, et al
2021
- **A novel negative regulatory mechanism of Smurf2 in BMP/Smad signaling in bone** *BONE RESEARCH*
Kushioka, J., Kaito, T., Okada, R., Ishiguro, H., Bal, Z., Kodama, J., Chijimatsu, R., Pye, M., Narimatsu, M., Wrana, J. L., Inoue, Y., Ninomiya, H., Yamamoto, et al
2020; 8 (1): 41
- **The small compound, TD-198946, protects against intervertebral degeneration by enhancing glycosaminoglycan synthesis in nucleus pulposus cells** *SCIENTIFIC REPORTS*
Kushioka, J., Kaito, T., Chijimatsu, R., Okada, R., Ishiguro, H., Bal, Z., Kodama, J., Yano, F., Saito, T., Chung, U., Tanaka, S., Yoshikawa, H.
2020; 10 (1): 14190
- **Resting-state Amplitude of Low-frequency Fluctuation is a Potentially Useful Prognostic Functional Biomarker in Cervical Myelopathy** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
Takenaka, S., Kan, S., Seymour, B., Makino, T., Sakai, Y., Kushioka, J., Tanaka, H., Watanabe, Y., Shibata, M., Yoshikawa, H., Kaito, T.
2020; 478 (7): 1667–80
- **Assessment of effects of rhBMP-2 on interbody fusion with a novel rat model** *SPINE JOURNAL*
Okada, R., Kaito, T., Ishiguro, H., Kushioka, J., Otsuru, S., Kanayama, S., Bal, Z., Kitaguchi, K., Hashimoto, K., Makino, T., Takenaka, S., Sakai, Y., Yoshikawa, et al
2020; 20 (5): 821–29
- **Risk factors for in-hospital mortality after spine surgery: a matched case-control study using a multicenter database** *SPINE JOURNAL*
Kushioka, J., Takenaka, S., Makino, T., Sakai, Y., Kashii, M., Iwasaki, M., Yoshikawa, H., Kaito, T.
2020; 20 (3): 321–28
- **BMP and TGF beta use and release in bone regeneration** *TURKISH JOURNAL OF MEDICAL SCIENCES*
Bal, Z., Kushioka, J., Kodama, J., Kaito, T., Yoshikawa, H., Korkusuz, P., Korkusuz, F.
2020; 50: 1707–22
- **A novel and efficient method for culturing mouse nucleus pulposus cells** *SPINE JOURNAL*
Kushioka, J., Kaito, T., Chijimatsu, R., Okada, R., Ishiguro, H., Bal, Z., Kodama, J., Takenaka, S., Makino, T., Sakai, Y., Yoshikawa, H.
2019; 19 (9): 1573–83
- **Administration of ONO-2506 suppresses neuropathic pain after spinal cord injury by inhibition of astrocytic activation** *SPINE JOURNAL*
Ishiguro, H., Kaito, T., Hashimoto, K., Kushioka, J., Okada, R., Tsukazaki, H., Kodama, J., Bal, Z., Ukon, Y., Takenaka, S., Makino, T., Sakai, Y., Yoshikawa, et al
2019; 19 (8): 1434–42
- **Towards prognostic functional brain biomarkers for cervical myelopathy: A resting-state fMRI study** *SCIENTIFIC REPORTS*
Takenaka, S., Kan, S., Seymour, B., Makino, T., Sakai, Y., Kushioka, J., Tanaka, H., Watanabe, Y., Shibata, M., Yoshikawa, H., Kaito, T.
2019; 9: 10456

- **Intervertebral disc regeneration with an adipose mesenchymal stem cell-derived tissue-engineered construct in a rat nucleotomy model** *ACTA BIOMATERIALIA*
Ishiguro, H., Kaito, T., Yarimitsu, S., Hashimoto, K., Okada, R., Kushioka, J., Chijimatsu, R., Takenaka, S., Makino, T., Sakai, Y., Moriguchi, Y., Otsuru, S., Hart, et al
2019; 87: 118–29
- **Effect of the small compound TD-198946 on glycosaminoglycan synthesis and transforming growth factor beta 3-associated chondrogenesis of human synovium-derived stem cells in vitro** *JOURNAL OF TISSUE ENGINEERING AND REGENERATIVE MEDICINE*
Chijimatsu, R., Yano, F., Saito, T., Kobayashi, M., Hamamoto, S., Kaito, T., Kushioka, J., Hart, D. A., Chung, U., Tanaka, S., Yoshikawa, H., Nakamura, N.
2019; 13 (3): 446–58
- **Tranexamic acid for reducing intra- and postoperative blood loss in posterior lumbar interbody fusion: Is it safe enough? Response** *JOURNAL OF NEUROSURGERY-SPINE*
Kushioka, J., Yamashita, T., Okuda, S., Maeno, T., Matsumoto, T., Iwasaki, M., Yamasaki, R.
2018; 29 (2): 227
- **Difference in the fusion rate and bone formation between artificial bone and iliac autograft inside an inter-body fusion cage - A comparison between porous hydroxyapatite/type 1 collagen composite and autologous iliac bone** *JOURNAL OF ORTHOPAEDIC SCIENCE*
Kushioka, J., Kaito, T., Makino, T., Fujiwara, H., Tsukazaki, H., Takenaka, S., Sakai, Y., Yoshikawa, H.
2018; 23 (4): 622–26
- **Modified Scarf Osteotomy with Medial Capsule Interposition for Hallux Valgus in Rheumatoid Arthritis A Study of Cases Including Severe First Metatarsophalangeal Joint Destruction** *JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME*
Kushioka, J., Hirao, M., Tsuboi, H., Ebina, K., Noguchi, T., Nampei, A., Tsuji, S., Akita, S., Hashimoto, J., Yoshikawa, H.
2018; 100 (9): 765–76
- **Utility of intravenous tranexamic acid in single-level posterior lumbar interbody fusions Response** *JOURNAL OF NEUROSURGERY-SPINE*
Kushioka, J., Yamashita, T., Okuda, S., Maeno, T., Matsumoto, T., Iwasaki, M., Yamasaki, R.
2017; 27 (5): 616
- **High-dose tranexamic acid reduces intraoperative and postoperative blood loss in posterior lumbar interbody fusion** *JOURNAL OF NEUROSURGERY-SPINE*
Kushioka, J., Yamashita, T., Okuda, S., Maeno, T., Matsumoto, T., Yamasaki, R., Iwasaki, M.
2017; 26 (3): 363–67
- **Outcomes of modified metatarsal shortening offset osteotomy for forefoot deformity in patients with rheumatoid arthritis: Short to mid-term follow-up** *MODERN RHEUMATOLOGY*
Hirao, M., Ebina, K., Tsuboi, H., Nampei, A., Kushioka, J., Noguchi, T., Tsuji, S., Owaki, H., Hashimoto, J., Yoshikawa, H.
2017; 27 (6): 981–89