Stanford

Eri Takematsu

Postdoctoral Scholar, Plastic and Reconstructive Surgery

Bio

HONORS AND AWARDS

- Cranio-Maxillofacial North America Research Award, AO foundation (2024)
- John Haddad Young Investigator Award, American Society for Bone and Mineral Research (2024)
- Translational Stem Cell Award, California Institute of Regenerative Medicine (2023-2025)
- Young Investigator Award, American Society for Bone and Mineral Research (2023)
- Postdoctoral Fellowship, Japan Society for the Promotion of Science (2020-2023)
- Early Career Investigators Award, American Heart Association (2019)
- STAR Award, Society for Biomaterials (2019)
- George J. Heuer, Jr. Ph.D. Endowed Graduate Fellowship, University of Texas at Austin (2015-2018)
- Graduate Fellowship, Japan Student Services Organization (2015-2018)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of Texas at Austin , Biomedical Engineering (2020)
- Master of Science in Engineering, University of Texas at Austin , Biomedical Engineering (2018)
- Master of Engineering, Tokyo Institute of Technology , Electrochemistry (2015)
- Bachelor of Science, Tokyo University of Science , Applied Chemistry (2013)

STANFORD ADVISORS

- Charles Chan, Postdoctoral Faculty Sponsor
- Charles Chan, Postdoctoral Research Mentor

Publications

PUBLICATIONS

- **Ultrasensitive and multiplexed tracking of single cells using whole-body PET/CT.** *Science advances*
  Nguyen, H. T., Das, N., Ricks, M., Zhong, X., Takematsu, E., Wang, Y., Ruvalcaba, C., Mehadji, B., Roncali, E., Chan, C. K., Pratx, G.
  2024; 10 (24): eadk5747
- **Transmembrane stem factor nanodiscs enhanced revascularization in a hind limb ischemia model in diabetic, hyperlipidemic rabbits.** *Scientific reports*
  Takematsu, E., Massidda, M., Howe, G., Goldman, J., Felli, P., Mei, L., Callahan, G., Sligar, A. D., Smalling, R., Baker, A. B.
  2024; 14 (1): 2352
- **Thumb Osteoarthritis: Stem Cell Activation, Niche Augmentation and Tissue Regeneration**

Murphy, M., Takematsu, E., Koepke, L., Tong, X., Butler, G., Ambrosi, T., Hoover, M., Wang, Y., Zhao, L., Wong, J., Reid, A., Longaker, M., Chant, et al
MARY ANN LIEBERT, INC.2023

- **Thumb Osteoarthritis: Stem Cell Activation, Niche Augmentation and Tissue Regeneration**
  Murphy, M., Takematsu, E., Koepke, L., Tong, X., Butler, G., Ambrosi, T., Hoover, M., Wang, Y., Zhao, L., Wong, J., Reid, A., Longaker, M., Chan, et al
  MARY ANN LIEBERT, INC.2023
- **Purification and functional characterization of novel human skeletal stem cell lineages.** *Nature protocols*
  Hoover, M. Y., Ambrosi, T. H., Steininger, H. M., Koepke, L. S., Wang, Y., Zhao, L., Murphy, M. P., Alam, A. A., Arouge, E. J., Butler, M. G., Takematsu, E., Stavitsky, S. P., Hu, et al
  2023
- **Optimizing Delivery of Therapeutic Growth Factors for Bone and Cartilage Regeneration.** *Gels (Basel, Switzerland)*
  Takematsu, E., Murphy, M., Hou, S., Steininger, H., Alam, A., Ambrosi, T. H., Chan, C. K.
  2023; 9 (5)
- **Transmembrane stem cell factor protein therapeutics enhance revascularization in ischemia without mast cell activation** *NATURE COMMUNICATIONS*
  Takematsu, E., Massidda, M., Auster, J., Chen, P., Im, B., Srinath, S., Canga, S., Singh, A., Majid, M., Sherman, M., Dunn, A., Graham, A., Martin, et al
  2022; 13 (1): 2497
- **Genome wide analysis of gene expression changes in skin from patients with type 2 diabetes** *PLOS ONE*
  Takematsu, E., Spencer, A., Auster, J., Chen, P., Graham, A., Martin, P., Baker, A. B.
  2020; 15 (2): e0225267
- **In vivo osteoconductivity of surface modified Ti-29Nb-13Ta-4.6Zr alloy with low dissolution of toxic trace elements.** *PloS one*
  Takematsu, E., Noguchi, K., Kuroda, K., Ikoma, T., Niinomi, M., Matsushita, N.
  2018; 13 (1): e0189967
- **Adhesive strength of bioactive oxide layers fabricated on TNTZ alloy by three different alkali-solution treatments.** *Journal of the mechanical behavior of biomedical materials*
  Takematsu, E., Cho, K., Hieda, J., Nakai, M., Katsumata, K., Okada, K., Niinomi, M., Matsushita, N.
  2016; 61: 174-181
- **Bioactive surface modification of Ti-29Nb-13Ta-4.6Zr alloy through alkali solution treatments.** *Materials science & engineering. C, Materials for biological applications*
  Takematsu, E., Katsumata, K., Okada, K., Niinomi, M., Matsushita, N.
  2016; 62: 662-7