

# Division of Reconstructive Surgery for Oral and Maxillofacial Region

## Department of Human Biology and Pathophysiology

### Outline

Division of Reconstructive Surgery for Oral and Maxillofacial Region is committed with oral surgeon aiming to progress the clinical care, education, and scientific research. Our mission is to advance the modern diagnosis and treatment for oral and maxillofacial diseases through basic and clinical research.

### Faculty members

Name	Position
Tsuyoshi Shimo	Professor
Shigehiro Takeda	Assistant professor/Research associate
Shintaro Yodogawa	Assistant professor/Research associate
Naohiro Horie	Assistant professor/Research associate
Daichi Hiraki	Assistant professor/Research associate
Nisrina Ekayani Nasrun	Postgraduate students



T. Shimo



S. Takeda



S. Yodogawa



N. Horie



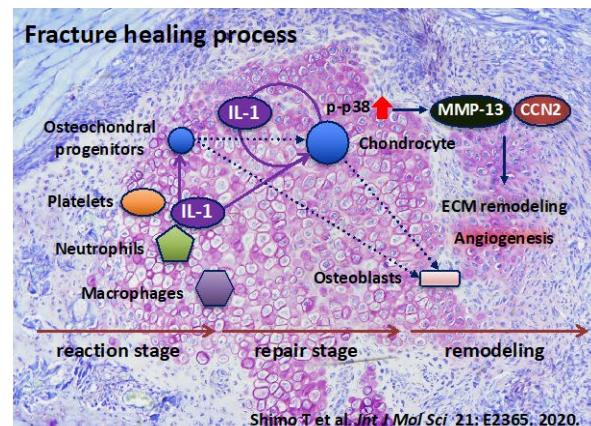
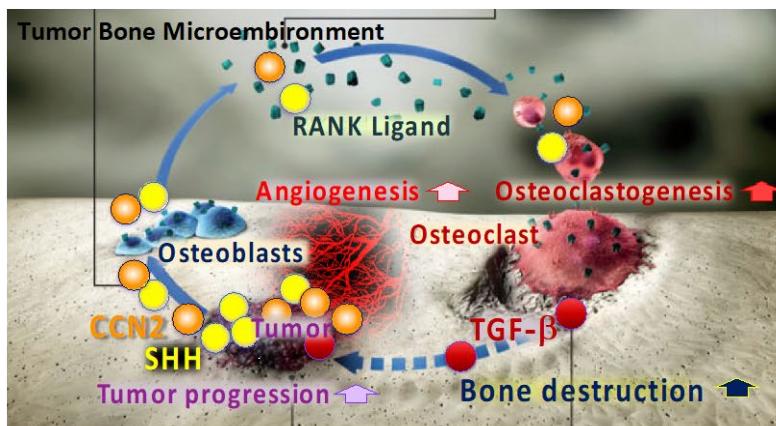
D. Hiraki



N.E Nasrun

### Main research in progress

1. Bone and tissue regeneration
2. A clinical analysis of orthognathic surgery
3. Prevention of tumor invasion and metastasis
4. Effect of periodontal pathogens on the pancreas
5. Regulation and the mechanism of cancer-induced bone destruction
6. Association between the abnormal oral microbiome and carcinogenesis



Shimo T et al. *Int J Mol Sci* 21: E2365, 2020.

## **Current publications (2023-2024)**

### **Original article**

1. Mouse Models of Tumor Bone Metastasis and Invasion for Studying CCN Proteins. Shimo T, Okui T, Horie N, Yokozeiki K, Takigawa M, Sasaki A. *Methods Mol Biol.* 2023;2582:343-353. IF=0.368
2. Immunohistochemical Analysis of CCN2 in Experimental Fracture Healing Models. Shimo T, Takebe H, Fujii S, Hosoya A. *Methods Mol Biol.* 2023;2582:335-342. IF=0.368
3. Angiogenesis Assays for the Analysis of CCN Proteins. Shimo T, Shimatani M, Tanimura A, Takigawa M. *Methods Mol Biol.* 2023;2582:295-308. IF=0.368
4. The involvement of taste receptors type 1 (TAS1R) and 2 (TAS2R) in cancer biology: A literature review. Nasrun NE, Ruslin M, Shimo T. *J. Okayama Dent. Soc.* 42 1-14. April 2023
5. The roles of type 1 and type 2 taste receptors in bone remodeling: A literature review. Nasrun NE, Tanimura T, Shimo T. *Oral Sci Int.* 21, Issue 1 p. 15-27. 02 April 2023 IF=0.5
6. Bone formation ability of Gli1+ cells in the periodontal ligament after tooth extraction. Fujii S, Takebe H, Mizoguchi T, Nakamura H, Shimo T, Hosoya A. *Bone.* 2023 Aug; 173: 116786. IF=4.626
7. Effects of prolonged stimulation with heated tobacco products (Ploom TECH +) on gingival epithelial cells. Uehara O, Nakamoto N, Hiraki D, Paudel D, Sugiyama N, Morikawa T, Yoshida K, Kawano Y, Shimo T, Furuichi Y, Miura H, Abiko Y. *J Periodontal Res.* 2023 Jun;58(3):553-563. IF=3.946
8. The Role of Hedgehog Signaling in the Melanoma Tumor Bone Microenvironment. Shamsoon K, Hiraki D, Yoshida K, Takabatake K, Takebe H, Yokozeiki K, Horie N, Fujita N, Nasrun NE, Okui T, Nagatsuka H, Abiko Y, Hosoya A, Saito T, Shimo T. *Int J Mol Sci.* 2023 May 16;24(10):8862. IF=6.208
9. Systemic Administration of Lipopolysaccharide from Porphyromonas gingivalis Decreases Neprilysin Expression in the Mouse Hippocampus. Morikawa T, Uehara O, Paudel D, Yoshida K, Harada F, Hiraki D, Sato J, Matsuoka H, Kuramitsu Y, Michikawa M, Abiko Y. *In Vivo.* 2023 Jan-Feb;37(1):163-172. IF=2.406

### **Clinical Case Report**

1. Surgical management of dentigerous cyst arises from ectopic tooth: A report of three consecutive cases and literature review. Permana H, Ruslin M, Yusuf ASH, Gazali M, Fauzi A, Shimo T, Boffano P, Forouzanfar T. *J Stomatol Oral Maxillofac Surg.* 2024 Jun;125(3):101685.
2. Unilateral hypoglossal nerve palsy following orthognathic surgery: A case report and literature review. Sato K, Nasrun NE, Fujita K, Chieda K, Nagayasu H, Shimo T, Akizuki K. *Int J Surg Case Rep.* 2023 Oct;111:108848. IF= 0.2