

## Section of Oral Pathology

### 1. Staff and Students

Professor	Akira YAMAGUCHI
Lecturer	Ken-ichi Katsube
Assistant Professor	Kei Sakamoto
Tokunin Assistant Professor	Sadahiro Tamamura
Technician	Miwako Hamagaki
Graduate Students	
Ph.D. Course	Samir Kumar Pal Tadanobu Aragaki (Maxillofacial Surgery) Tasuku Kihara (Maxillofacial Surgery) Kousuke Emehara (Removable PartialDenture Prosthodontics) Tsutomu Matsumoto (Maxxilofacial Orthognathics) Akiko Himeno (Periodontology) Erika Oue (Maxillofacial Surgery) Kou Watanabe (Maxillofacial Surgery) Kiyoshi Sato (Oral and Maxillofacial Surgery) Yuji Makino (Juntendou University) Ayako Nakane (Developmental Oral Health Sciences) Yuji Matsushita (Maxillofacial Surgery) Takahiko Shiba (Periodontology) Rumana Khanom Zhao Xin
Secretary	Yumi Tanaka

### 2. Purpose of Education

Oral Pathology section lectures the Module “Pathology” to 3rd grade students. This Module is comprised of two categories; General Pathology and Oral Pathology. Main objective of General Pathology is to provide students various opportunities and knowledge about general aspects of various diseases. Oral Pathology provides details of pathogenesis, pathophysiology and histopathological characteristics in various oral diseases.

### 3. Research Subjevts

- 1) Clinico-pathological research on oral and maxillofacial regions
- 2) Molecular mechanism of bone formation and bone regeneration
- 3) Roles of Notch signaling in skeletal formation and regeneration
- 4) Molecular mechanism of bone destruction by oral cancers
- 5) Evolutional changes in skeletal formation

### 4. Clinical Services

Our Dental Hospital has over 2,000 biopsy cases a year. Oral Pathology Section is involved in histopathological diagnosis of these biopsy cases.

### 5. Publications

#### Original Articles

1. Kayamori K, Sakamoto K, Nakashima T, Takayanagi T, Morita K, Omura K, Nguyen ST, Miki Y, Iimura T, Himeno A, Akashi T, Yamada-Okabe H, Ogata E, Yamaguchi A: Roles of IL-6 and PTHrP in osteoclast formation associated with oral cancers: The significance of IL-6 synthesized by stromal cells in response to cancer cells. *Amer J Pathol* 176,968-980,2010
2. Etoh M, Yamaguchi A: Repetition of continuous PTH treatments followed by periodic withdrawals exerts anabolic effects on rat bone. *J Bone Miner Metab* 28:641-649,2010
3. Hoshino A, Iimura T, Ueha S, Hanada S, Maruoka Y, Mayahara M, Suzuki K, Imai T, Ito M, Manome Y, Yasuhara M, Kirino T, Yamaguchi A, Matsushima K, Yamamoto K: Deficiency of chemokine receptor CCR1 causes osteopenia

## Oral Restitution

due to impaired functions of osteoclasts and osteoblasts. *J Biol Chem* 285:28826-28837, 2010

4. Aragaki T, Michi Y, Katsube K, Uzawa N, Okada N, Akashi T, Amagasa T, Yamaguchi A, Sakamoto K: Comprehensive keratin profiling reveals distinctions between keratocystic odontogenic tumor and orthokeratinized odontogenic cyst. *Human Pathol* 42:1718-1725,2010
5. Nishikawa K, Isogai M, Nakashima T, Takeda S, Michito, Hamada M, Kimura A, Kodama T, Yamaguchi A, Owen MJ, Takahashi S, Takayanagi H: Maf mediates the age-related switch in mesenchymal cell. *J Clin Invest* 120:3455-3465,2010
6. Wang S, Kawashima N, Sakamoto K, Katsube K, Umezawa A, Suda H: Osteogenic differentiation of mouse mesenchymal progenitor cell, Kusa-A1 is promoted by mammalian transcriptional repressor Rbpj. *Biochem Biophys Res Commun* 400:39-45, 2010
7. Tanabe H, Takayama I, Nishiyama T, Shimazaki M, Kii I, Li M, Amizuka N, Katsube K, Kudo A: Periostin associates with Notch1 precursor to maintain Notch1 expression under a stress condition in mouse cells. *Plos One* 5(8):e12234. 2010

## Review

1. Iimura T, Himeno A, Nakane A, Yamaguchi A: Hox genes, a molecular constraint for development and evolution of vertebrate body plan. *J Oral Biosci* 52:155-163,2010

## Case reports

1. Mochizuki Y, Omura K, Sakamoto K, Nakanishi S, Satoh K, Marukawa E, Yamaguchi A: A case of primary combined neuroendocrine carcinoma with squamous cell carcinoma in the upper gingiva. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 109(4): 34-9,2010
2. Yanagawa T, Yamagata K, Ishibashi N, Onizawa K, Bukawa H, Yamaguchi A, Harada H, Noguchi M: Cheilitis glandularis: Two case reports of Asian-Japanese men and literature review of Japanese cases. *ISRN Dentistry* (in press)