



2012年度「口腔環境制御研究」報告：長崎大学歯学部

<論文>

口腔病原微生物学分野

1. Yoshida A, Niki M, Ansai T and Nakayama K : Oral disease and hydrogen sulfide production by oral bacteria. *Adv. Med. Biol.* 57: 131–145, 2013.
2. Sato K, Yukitake H, Narita Y, Shoji M, Naito M, and Nakayama K : Identification of *Porphyromonas gingivalis* proteins secreted by the Por secretion system, *FEMS Microbiol. Lett.* 338(1):68–76, 2013.
3. Shoji M, Yukitake H, Sato K, Shibata Y, Naito M, Aduse-Opoku J, Abiko Y, Curtis MA and Nakayama K: Identification of an O-antigen chain length regulator, WzzP, in *Porphyromonas gingivalis*. *MicrobiologyOpen*, in press.

口腔病態薬理学分野

1. Narahara S, Matsushima H, Sakai E, Fukuma Y, Nishishita K, Okamoto K, Tsukuba T: Genetic backgrounds and redox conditions influence morphological characteristics and cell differentiation of osteoclasts in mice. *Cell. Tissue Res.* 348(1): 81–94, 2012.
2. Sato T, Nishishita K, Okada Y, Toda K.: Efferent fibers innervate gustatory and mechanosensitive afferent fibers in frog fungiform papillae. *Chem Senses.* 37, 315–324. 2012.
3. Sakamoto H, Sakai E, Fumimoto R, Yamaguchi Y, Fukuma Y, Nishishita K, Okamoto K, Tsukuba T: Deltamethrin inhibits osteoclast differentiation via regulation of heme oxygenase-1 and NFATc1. *Toxicol. in Vitro*, 26, 817–822, 2012.
4. Nishishita K, Sakai E, Okamoto K, Tsukuba T.: Structural and phylogenetic comparison of napsin genes: The duplication, loss of function and human-specific pseudogenization of napsin B. *Gene.* 517(2):147–57, 2013.
5. Yamaguchi Y, Sakai E, Sakamoto H, Fumimoto R, Fukuma Y, Nishishita K, Okamoto K, Tsukuba T. : Inhibitory effects of tert-butylhydroquinone on osteoclast differentiation via up-regulation of heme oxygenase-1 and down-regulation of HMGB1 release and NFATc1 expression. *J Appl Toxicol.* in press.
6. Sakai E, Shimada-Sugawara M, Yamaguchi Y, Sakamoto H, Fumimoto R, Fukuma Y, Nishishita K, Okamoto K, and Tsukuba T.: Fisetin inhibits osteoclastogenesis through prevention of RANKL-induced ROS production by Nrf2-mediated up-regulation of phase II antioxidant enzymes. *J. Pharmacol. Sci.*, in press.

口腔保健学分野

1. Furugen R, Hayashida H, Saito T. : *Porphyromonas gingivalis* and *Escherichia coli* lipopolysaccharide causes resistin release from neutrophils. *Oral Dis.* Sep 26. doi: 10.1111/odi.12027, 2012.

歯周病学分野

1. Kishimoto T, Kaneko T, Ukai T, Yokoyama M, Ayon Haro R, Yoshinaga Y, Yoshimura A, Hara Y: Peptidoglycan and lipopolysaccharide synergistically enhance bone resorption and osteoclastogenesis. *J Periodontal Res.* 47(4) : 446–54, 2012
2. Kuramoto A, Yoshinaga Y, Kaneko T, Ukai T, Shiraishi C, Oshino K, Ichimura I, Hara Y: The formation of immune complexes is involved in the acute phase of periodontal destruction in rats. *J Periodontal Res.* 47(4) : 455–462, 2012
3. Yoshiida CA, Komori H, Maruyama Z, Miyazaki T, Kawasaki K, Furuichi T, Fukuyama R, Mori M, Yamana K, Nakamura K, Liu W, Toyosawa S, Moriishi T, Kawaguchi H, Takada K, Komori T: SP7 inhibits osteoblast differentiation at a late stage in mice. *PLoS One.* 7(3) : e32364, 2012
4. Li X, Zhou L, Takai H, Sasaki Y, Mezawa M, Li Z, Wang Z, Yang L, Wang S, Matsumura H, Kaneko T, Yoshimura A, Ogata Y: *Aggregatibacter actinomycetemcomitans* lipopolysaccharide regulates bone sialoprotein gene transcription. *J Cell Biochem.* 113(9) : 2822–2834, 2012
5. Yoshinaga Y, Ukai T, Kaneko T, Nakatsu S, Shiraishi C, Kuramoto A, Oshino K, Ichimura I, Hara Y: Topical application of lipopolysaccharide into gingival sulcus promotes periodontal destruction in rats immunized with lipopolysaccharide. *J Periodontal Res.* 47(5) : 674–680, 2012
6. Sato K, Yoshimura A, Kaneko T, Ukai T, Ozaki Y, Nakamura H, Li X, Matumura H, Hara Y, Ogata Y: A Single Nucleotide Polymorphism in 3' -Untranslated Region Contributes to the Regulation of Toll-Like Receptor 4 Translation. *J Biol Chem.* 282(30) 25163–25172, 2012
7. Kudo C, Naruishi K, Maeda H, Abiko Y, Hino T, Iwata M, Mitsuhashi C, Murakami S, Nagasawa T, Nagata T, Yoneda S, Nomura Y, Noguchi T, Numabe Y, Ogata Y, Sato T, Shimauchi H, Yamazaki K, Yoshimura A, Takashiba S : Assessment of the Plasma/Serum IgG Test to Screen for Periodontitis. *J Dent Res.* 91(12) :1190–1195, 2012
8. Nagano F, Kaneko T, Yoshinaga Y, Ukai T, Kuramoto N, Nakatsu S, Oshino K, Ichimura I, Hara

- Y: Gram-positive bacteria as an antigen topically applied into gingival sulcus of immunized rat accelerates periodontal destruction. *J Periodontal Res*, in press
9. 北村正博, 古市保志, 藤井健男, 川浪雅光, 國松和司, 島内英俊, 山田 了, 小方頼昌, 和泉雄一, 伊藤公一, 中川種昭, 新井 高, 山崎和久, 吉江弘正, 野口俊英, 渋谷俊昭, 高柴正悟, 栗原英見, 永田俊彦, 横田 誠, 前田勝正, 廣瀬卓雄, 坂上竜資, 原 宜興, 野口和行, 小笠原健文, 村上伸也: 歯周炎罹患歯に対するFGF-2投与の長期的効果および安全性の検討. *日歯周誌* 54(1): 38-45, 2012
 10. 吉永美穂, 鵜飼 孝, 吉永泰周, 白石千秋, 金子高士, 岸本隆明, 佐藤佳昌, 吉村篤利, 原宜興: テーパード毛歯ブラシの臨床効果に関する研究. *日歯保存誌* 55(2): 158-164, 2012

小児歯科学分野

1. Akihiro Yoshida, Oum-Keltoum Ennibi, Hideo Miyazaki, Tomonori Hoshino, Hideaki Hayashida, Tatsuji Nishihara, Shuji Awano, Toshihiro Ansai. Quantitative discrimination of *Aggregatibacter actinomycetemcomitans* highly leukotoxic JP2 clone from non-JP2 clones in diagnosis of aggressive periodontitis. *BMC Infectious Diseases* 12 (1), 253, 2013.
2. K Saito, I Jang, K Kubota, T Hoshino, H Hotokezaka, N Yoshida, T Fujiwara Removable orthodontic appliance with nickel-titanium spring to reposition the upper incisors in an autistic patient. *Special Care in Dentistry* 33 (1), 35-39, 2013.
3. Shakh M. A. Roufa, Yuko Ohara-Nemotoa, Tomonori Hoshinob, Taku Fujiwarab, Toshio Onoa, Takayuki K. Nemotoa, Discrimination based on Gly and Arg/Ser at position 673 between dipeptidyl-peptidase (DPP) 7 and DPP11, widely distributed DPPs in pathogenic and environmental gram-negative bacteria. *Biochimie*, Online press, doi.org/10.1016/j.biochi, 2012.
4. A Jensen, T Hoshino, M Kilian. Taxonomy of the Anginosus group of the genus *Streptococcus* and description of *Streptococcus anginosus* subsp. *whileyi* subsp. nov. and *Streptococcus constellatus* subsp. *viborgensis* subsp. nov. *International Journal of Systematic and Evolutionary Microbiology*, Online press, doi: 10.1099/ij.s.0.043232-0, 2012
5. Tomonori Hoshino, Taku Fujiwara, Shigetada Kawabata. Evolution of Cariogenic Character in *Streptococcus mutans*: Horizontal Transmission of Glycosyl Hydrolase Family 70 Genes. *Scientific Reports* 2: 518 doi: 10.1038/srep00518, 2012.
6. Martinez-Martinez RE, Fujiwara T, Patiño-Marin N, Hoshino T, Wilson M, Loyola-Rodríguez JP. Comparison of oral streptococci biofilm in caries-free and caries-affected preschool Mexican children. *Acta Odontologica Latinoamericana*. 25(1):27-32, 2012.

7. Y Kamasaki, T Nakamura, K Yoshizaki, I Iwamoto, A Yamada, E Fukumoto, Y Maruya, K Iwabuchi, K Furukawa, T Fujiwara, S Fukumoto. Glycosphingolipids regulate Ameloblastin expression in dental epithelial cells. *Journal of dental research*. 91:78–83, 2012.

<受賞など特記すべき事柄>

1. 小児歯科学分野の星野倫範講師は平成23年度日本小児歯科学会Lion Award学術賞を平成24年5月開催の本学会総会において受賞しました。また、本受賞は平成24年7月4日付けの長崎新聞で報道されました。
2. Hoshino et al. (Scientific Reports 2: 518 doi: 10.1038/srep00518, 2012) の論文がネイチャージャパンのサイトで注目の論文として紹介されました。
<http://www.natureasia.com/ja-jp/srep/abstracts/38498>
3. 総合歯科歯周病治療室の鵜飼孝講師が「炎症性骨吸収メカニズムの解明」の一連の研究により第12回日本歯周病学会学術賞を受賞しました。