

## 発生物学・再生医学分野 2013年(平成25年)1月～12月教室業績

### 論文(英文)

- 1) Chavez MG, Yu W, Biehs B, Harada H, Snead, ML, Klein OD: Characterization of Dental Epithelial Stem Cells from the Mouse Incisor with 2D and 3D Platforms. *Tissue Eng Part C Methods*. 2013 Jan;19(1):15-24
- 2) Sakano M, Otsu K, Fujiwara N, Fukumoto S, Yamada A, Harada H: Cell dynamics in cervical loop epithelium during transition from crown to root: implications for Hertwig's epithelial root sheath formation. *J Periodontal Res*, 2013; 48:262-267, e-pub 14 Sep 2012
- 3) Zheng L, Seon YJ, Mourão MA, Schnell S, Kim D, Harada H, Papagerakis S, Papagerakis P: Circadian rhythms regulate amelogenesis. *Bone*. 2013 Jul;55(1):158-65. doi: 10.1016/j.bone.2013.02.011. Epub 2013 Feb 26.
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- 5) Ida-Yonemochi H, Harada H, Ohshima H, Saku T: Reciprocal expressions between  $\alpha$ -dystroglycan and integrin  $\beta$ 1, perlecan receptors, in the murine enamel organ development. *Gene Expr Patterns*. 2013 Dec;13(8):293-302. doi: 10.1016/j.gep.2013.05.004. Epub 2013 May 27.
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- 8) Otsu K, Sakano M, Masuda T, Fujiwara N, Harada H.: The role of Rho-kinases in ameloblast differentiation. *Journal of Oral Biosciences*. 2013;55(4):159-164.
- 9) Arakaki M, Egusa H, Otsu K, Saitoh I, Miura T, Harada H.: Frontier dental research on iPS cells. *Journal of Oral Biosciences*. 2013;55(4):191-199.

### 商業誌(和文)

- 1) 大津圭史：iPS細胞から歯原性間葉細胞間葉細胞への分化誘導. 再生医療における臨床研究と製品開発 技術情報協会 191-194 (2013) (書籍)

## 学会発表

### 国際学会(招聘講演)

- 1) Harada H, Otsu K, Sakano M, Fujiwara N: Role of Rho signaling during amelogenesis. Tripartite Conference (Korea- China- Japan) on Tooth and Bone; Development & Regeneration" in Seoul, Korea will hold an International Symposium on "Tooth and Bone; Development & Regeneration" Seoul, Korea, Aug. 7-11, 2013
- 2) Otsu K, Sakano M, Fujiwara N, Harada H: Differentiation of iPS cells into odontogenic cells. XXIII International Symposium on Morphological Sciences. Niigata, Japan. Sep. 10-13, 2013

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- 1) Harada H, Otsu K, Sakano M, Fujiwara N: Stemness of dental epithelial stem cells considering feature of dental epithelial cells. International Symposium Frontier Meeting, Seoul/Jeonju 2013 Development, Evolution, Taxonomy, and Genetics of Tooth Structure "Tooth Voyage, Up To Date", Jeonju, Korea, 2013. 2. 12-15.
- 2) Sakano M, Otsu K, Fujiwara N, Harada H: Cell dynamics in cervical loop epithelium during transition from crown to root: implications for Hertwig' epithelial root sheath formation. International Symposium Frontier Meeting, Seoul/Jeonju 2013 Development, Evolution, Taxonomy, and Genetics of Tooth Structure "Tooth Voyage, Up To Date", Jeonju, Korea, 2013. 2. 12-15.
- 3) Bori E, Den Besten P, Harada H, Bronckers ALJJ, Varga G.: Polarized monolayer of Hat-7 cells, a new model for pH regulation and bicarbonate transport of ameloblasts by microfluorometry. 11th International Conference on Tooth Morphogenesis and Differentiation (La Londe-les-Maures, France), 2013
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- 5) Harada H, Otsu K, Sakano M, Fujiwara N: Trial experiment of human biotooth using an impacted 3<sup>rd</sup> molar. 11<sup>th</sup> International Conference on Tooth Morphogenesis and Differentiation, La Londe Les Maures, Feance, May 26-31, 2013
- 6) Zheng L, Kim D, Harada H, Papagerakis S, Papagerakis P: The circadian clock regulates ameloblast differentiation. 11<sup>th</sup> International Conference on Tooth Morphogenesis and Differentiation, La Londe Les Maures, Feance, May 26-31, 2013

- 7) Fujiwara N, Ota M, Sakano M, Otsu K, Woo JT, Harada H: Stimulation of root formation and regeneration by natural compound. 11<sup>th</sup> International Conference on Tooth Morphogenesis and Differentiation, La Londe Les Maures, Feance, May 26-31, 2013
- 8) Oka K, Kira M, Tsuruga E, Harada H, Fujiwara N, Sawa Y, Ozaki M: The role of fibrillin during tooth root and periodontal ligament tissue development. 11<sup>th</sup> International Conference on Tooth Morphogenesis and Differentiation, La Londe Les Maures, Feance, May 26-31, 2013
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- 10) Ida-Yonemochi H, Ohshima H, Harada H: The functional significance of glycogen accumulation in cell differentiation during amelogenesis. 11<sup>th</sup> International Conference on Tooth Morphogenesis and Differentiation, La Londe Les Maures, Feance, May 26-31, 2013
- 11) Otsu K, Sakano M, Masuda T, Fujiwara N, Harada H: Functional role fo Rho signaling in ameloblast differentiation. The Japan-Korea Basic Scientific Cooperation Program 2013 Japan (Iwate Medical Univ) – (Yonsei Univ) Joint Research Project (JSPS) Seminar. Iwate, Japan. Dec. 20, 2013
- 12) Fujiwara N: The role of Rho signaling in HERS development. –pilot study-. The Japan-Korea Basic Scientific Cooperation Program 2013 Japan (Iwate Medical Univ) – (Yonsei Univ) Joint Research Project (JSPS) Seminar. Morioka, Japan. Dec 20-21, 2013
- 13) Kumakami-Sakano M: Tooth regeneration using iPS cells. The Japan-Korea Basic Scientific Cooperation Program 2013 Japan (Iwate Medical Univ) – (Yonsei Univ) Joint Research Project (JSPS) Seminar. Morioka, Japan. Dec 20-21, 2013
- 14) Masuda T, Otsu K, Fujiwara N, Kumakami-Sakano M, Hoshi H, Harada H, Sugiyama Y: Effect of BMP-2 and HGF on bone regeneration., The Japan-Korea Basic Scientific Cooperation Program 2013 Japan (Iwate Medical Univ) – (Yonsei Univ) Joint Research Project (JSPS) Seminar. Morioka, Japan. Dec 20-21, 2013

#### 国内学会(招聘講演)

- 1) 原田英光、藤原尚樹、大津圭史 : Introduction - エナメル上皮幹細胞研究の国際的潮流と今後の展望. シンポジウム: 齧歯類切歯の恒常的成長を支えるエナメル上皮幹細胞を考える. 第118回日本解剖学会総会・全国学術集会. 3月28-30日 高松 (2013)
- 2) 田巻玉器、大津圭史、原田英光、長澤丘司、入江一元 : エナメル上皮幹細胞の分裂後の

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- 3) 原田英光：ヒトの歯の再生に向けた戦略と展望. 第 11 回日本再生歯科医学会総会・学術大会. 8/31 東京(日本大学松戸歯学部主催) 2013
- 4) 原田英光、大津圭史、藤原尚樹、坂野深香：イメージングを駆使した歯の発生の新たな理解への挑戦. シンポジウム：バイオイメージングの最前線 - 歯科基礎医学会医学研究を照らす新しい光-. 第 55 回歯科基礎医学会学術大会・総会. 9 月 20-22 日 岡山 (2013)
- 5) 原田英光：エナメル上皮幹細胞研究から考えるヒトの歯の再生に向けた戦略と展望. 第 58 回日本口腔外科学会総会・学術大会. 10/12 福岡 2013
- 6) 大津圭史 iPS 細胞を使って何が出来るか？ 歯科再生研究の最前線 第 30 回岩手医科大学附属病院歯科医療セミナー 12 月 盛岡 (2013)

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- 1) 大津圭史、坂野深香、増田智幸、藤原尚樹、原田英光： iPS 細胞における神経堤由来細胞への分化能 第 12 回 日本再生医療学会総会 3 月 22 日 横浜 (2013)
- 2) 大津圭史、坂野深香、増田智幸、藤原尚樹、原田英光：エナメル上皮幹細胞における Rho シグナリングの役割. 第 118 回日本解剖学会総会・全国学術集会. 3 月 28-30 日 高松 (2013)
- 3) 大津圭史、藤原尚樹、原田英光：Rho シグナリングのエナメル芽細胞分化における役割. 第 55 回歯科基礎医学会学術大会・総会. 9 月 20-22 日 岡山 (2013)
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