

**The 5th Annual Meeting of
Japanese Association of Regeneration Dentistry
September 22-23, 2007, Tokyo, JAPAN**

Poster Presentation

- P01.** Modulation of plasma membrane ionic mechanism induced by aging: expression of AQP water channels in rat parotid acinar cell
Shibukawa Y, Matsuki-Fukushima M, Hashimoto S, Sugiya H
Oral Health Science Center HRC7; Department of Physiology, Tokyo Dental College; Department of Physiology; Nihon University School of Dentistry at Matsudo; Department of Pathology, Tokyo Dental College
- P02.** Localization of telomeric-repeat binding factor 2 (TRF2) and tankyrase in bone cells
Daisuke Sato, Takayuki Endoh, Yoshiyuki Wada, Kazuyuki Ishihara, Kenichi Matsuzaka, Masao Yoshinari, Sadamitsu Hashimoto, Masakazu Tazaki and Takashi Inoue
Oral Health Science Center HRC7, Tokyo Dental College,
- P03.** Preventive effects of epigallocatechin-3-gallate against serial passage-induced senescence in primary mammalian cells
Dong-Wook Han, Sadami Tsutsumi and Suong-Hyu Hyon*
Institute for Frontier Medical Sciences, Kyoto University, Kyoto 606-8507, Japan
- P04.** Structure and constitution change in the supragingival calculi in the age difference
Hiroyuki Mishima, Ikuko Kawai, Saki Waziki, Akiyasu Nishino, Kazuo Tanaka, Atsushi Ookubo, Yasuo Miyake, Takaaki Yanagisawa
Department of Health Sciences, Kochi Gakuen College, Kochi, Japan; Applied Life Science Course, Kochi Gakuen College, Kochi, Japan; Tanaka Dental Clinic, Shimanto, Japan; Department of Histology, Cytology and Development, Nihon University School of Dentistry at Matsudo, Matsudo
- P05.** Influence of ageing on bacterial count.
Masahiro Ryu, Takayuki Ueda, Kaoru Sakurai, Takayuki Saito, Kazuyuki Ishihara
Oral Health Science Center HRC7; Department of Removable Prosthodontics and Gerodontology, Department of Microbiology, Tokyo Dental College
- P06.** Dentilisin involves in the regulation of gene expression in *Toreponema denticola*
Satoru Inagaki, Katsuji Okuda, Kazuyuki Ishihara
Oral Health Science Center HRC7, Tokyo Dental College
- P07.** Development of a differentiation screening method using 3D culture by ES cells
Koichi IMAI and Masaaki NAKAMURA
Department of Biomaterials, Osaka Dental University

- P08.** Fibrous hydroxyapatite material with BMP-2 gene induces ectopic bone formation
Mitsumasa Oda, Hisatomo Kondo, Shinji Kuroda, Shohei Kasugai
Oral Implantology and Regenerative Dental Medicine, Tokyo Medical and Dental University
- P09.** New treatment of bone regeneration using combined recombinant human BMP-2 and Alginic acid gel
Kozo Yamaji, Yoshihiro Nishitani, Shunji Izawa, Junichi Doi, Yasuo Shinno, Masanori Omae, Youko Abo, Junichi Yamauchi * and Masahiro Yoshiyama
Department of Operative Dentistry, Okayama University Graduate School of Medicine, Dentistry; Pharmaceutical Sciences, Kuraray Medical Inc.
- P10.** Fabrication of 3-dimensional bone matrix alignment
Jun-Ichi Sasaki, Takuya Matsumoto, Hiroshi Egusa, Taiji Sohmura, Hirofumi Yatani
Osaka Univ.
- P11.** The application of the radial flow type bioreactor to the three-dimensional culture of the osteoblastic cell
Taichi Arano, Masao Yoshinari, Takashi Inoue, Toru Sato
Oral Health Science Center HRC7, Tokyo Dental College; Department of Crown and Bridge Prosthodontics, Tokyo Dental College
- P12.** Effects of the beads size in -TCP / alginate composite on osteoblast differentiation
Yoshitaka Yamauchi, Tomonori Matsuno, Yoshiya Hashimoto, Seita Adachi, Masaaki Nakamura, Tazuko Satoh
Department of Oral and Maxillofacial Surgery, The Nippon Dental University, School of Life Dentistry at Tokyo; Department of Bioartificial Organs, Institute for Frontier Medical Sciences, Kyoto University; Department of Biomaterials, Osaka Dental University
- P13.** Drug delivery effects and MSC differentiation on bTCP/collagen sponge composite-loaded PRP
Tomonori Matsuno, Yoshitaka Yamauchi, Yoshiya Hashimoto, Tatsuo Nakamura, Masaaki Nakamura, Tazuko Satoh
Department of Oral and Maxillofacial Surgery, The Nippon Dental University, School of Life Dentistry at Tokyo; Department of Bioartificial Organs, Institute for Frontier Medical Sciences, Kyoto University, Department of Biomaterials, Osaka Dental University
- P14.** Proliferation of osteoblast-like cells on zirconia and titanium
Daisuke Yamashita, Kenji Kanbara, Miho Machigashira, Motoharu Miyamoto, Hideo Sato, Seiji Ban
Kagoshima Univ. Grad. Sch.

- P15.** Reinforcement for softened root canal dentin using by nanometrical hydroxyapatite particles -Bonding strength of the adhesive resin to dentin of root canal-
Nobuyuki Kikuchi, Chikako Somei, Yumiko Taguchi, Hideki Makimura, Yasuhiro Tanimoto, Toru Hayakawa, Moriyasu Wada
Department of Renascent Dentistry, Nihon Univerisity School of Dentistry at Matsudo; Department of Dental Biomaterials, Nihon Univerisity School of Dentistry at Matsudo
- P16.** Protein immobilization onto titanium surface using tresyl chloride technique and its biological effect
Tohru Hayakawa, Kamolpan Pugdee, Yasuko Shibata, Masao Yoshinari, Yoshimitu Abiko.
Department of Dental Biomaterials, Nihon University School of Dentistry at Matsudo; Department of Biochemistry and Molecular Biology, Nihon University School of Dentistry at Matsudo; Oral Health Science Center HRC7, Tokyo Dental College.
- P17.** Development of bioactive titanium surface by artificial proteins
Katsutoshi Kokubun, Kenji Kashiwagi, Masao Yoshinari, Takashi Inoue, Kiyotaka Shiba
Department of Clinical Pathophysiology, Tokyo Dental College; Department of Protein Enginerring, Cancer institute, Japanese Foundation for Cancer Research; 3CREST/JST; Oral Health Science Center HRC7, Tokyo Dental College
- P18.** Effect of CHP (cholesterol-bearing pullulan) - nanogel /prostaglandin E1 on wound healing
Hiroshi Kobayashi
Oral Impltantly & Regenerative Dental Medicine, Tokyo medical and dental university
- P19.** The different topography affect to Intracellular signaling of Human fibroblast cells
Eitoyo Kokubu, Kenichi Matsuzaka, Masao Yoshinari, Takashi Inoue
Orah Health Science Center HRC7, Tokyo Dental College
- P20.** Evaluation of phagocytosis of titanium minute particles by PMA-treated THP-1 cells (macrophage)
Masayuki Taira, Kaori Sasaki, Sersuo Saitoh, Takashi Nezu, Yoshima Araki, Takayuki Narushima
Department of Dental Materials Science and Technology, Iwate Medical University School of Dentistry; Department of Materials Processing, Tohoku University
- P21.** Clinical investigation about the Ti allergy
Atsushi Ookubo, Ryoji Shimogoryo, Tsunenori Matsunaga, Hiroyuki Mishima
Department of Histology, Cytology and Development, Nihon University School of Dentistry at Matsudo; Department of Cariology, Nagasaki University Graduate School of Biomedical Sciences; Kochi Gakuen College Health Sciences; Japan Institute of Advanced Dentistry

- P22.** Gene differences in epithelial rests of Malassez and oral epithelial cell by DNA microarray
Yoshihito Kurashige, Masato Saitoh, Daisuke Noro, Maiko Takeshima, Tohru Kaku, Seiji Igarashi, Takashi Inoue, Yoshihiro Abiko
Div of Pediatric Dentistry, Dep of Oral Growth and Development, Health Sciences University of Hokkaido; Institute of Personalized Medical Science, Health Sciences University of Hokkaido; Div of Clinical Oral Pathology, Dep of Human Biology and Pathophysiology, Health Sciences University of Hokkaido; Dep of Clinical Pathophysiology, Tokyo Dental College
- P23.** Expression of laminin-₂, integrin-₄ and integrin-₃ on adhesion and migration in primary culture of rat oral epithelium
Mikio Sugisawa, Takayasu Masaoka, Takashi Kinumatsu, Satoru Yamada, Yasunobu Enokiya, Takasi Muramatsu, Sadamitsu Hashimoto, Masaki Shimono
Oral Health Science Center HRC7; Department of Periodontology; Department of Pathology; Tokyo Dental College
- P24.** Immunolocalization of laminin-₂ and integrin-₄ in mouse regenerative junctional epithelium after gingivectomy
Takayasu Masaoka, Sadamitsu Hashimoto, Takashi Kinumatsu, Mikio Sugisawa, Satoru Yamada, Yasunobu Enokiya, Masaki Shimono
Oral Health Science Center HRC7; Department of Periodontology; Department of Pathology, Tokyo Dental College
- P25.** Molecular changes of denture supporting tissues against persistent mechanical stress in aged rats
Morito Tsuruoka, Kenichi Matsuzaka, Takashi Inoue
Oral Health Science Center HRC7; Department of Clinical Pathophysiology, Tokyo Dental College
- P26.** A study on autotransplantation of cultured bone marrow cell in periodontal cavity
Nobuhiro Ozaki, Suguru Ohta, Eitoyo Kokubu, Morito Tsuruoka, Takashi Inoue
Osaka University Dental Hospital; Department of Clinical Pathophysiology, Tokyo Dental College; Oral Health Science Center HRC7, Tokyo Dental College
- P27.** Effect of Malassez-epithelial cells on proliferation, migration and calcification of osteoblastic cells in transwell membrane co-culture system
Daisuke Noro, Masato Saitoh, Kurashige Yoshihito, Igarashi Seiji, Yoshihiro Abiko
Institute of Personalized Medical Science, Health Sciences University of Hokkaido
- P28.** Age related alteration of gene expression profile in rat incisor tooth germ
Mariko Matsue, Kenichi Matsuzaka, Takeshi Yamawaki, Takashi Nezu, Shinichi Naruse, Akinobu Kagami, Takashi Inoue
Oral Health Science Center HRC7, Tokyo Dental College
- P29.** Influence of Cyclodextrin on mouse fibroblast proliferation
Takafumi Asai
Aichi-Gakuin Univ.

- P30.** Effect of suppression of adiponectin receptors on the differentiation of osteoblasts
Aiko Kamada, Isao Tamura, Seiji Goda, Yoshihiro Yoshikawa, Eisuke Domae, Takashi Ikeo
Department of Biochemistry, Osaka Dental University
- P31.** Effects of adiponectin on the kinetics of human pulpal cells
Isao Tamura, Yoshihiro Yoshikawa, Eisuke Domae, Seiji Goda, Aiko Kamada, Takashi Ikeo.
Department of Biochemistry, Osaka Dental University
- P32.** Effect of dentin phosphophoryn on cellular migration of human dental pulp cells
Yoshiyuki Yasuda, Masanobu Izumikawa, Takashi Saito
Department of Operative Dentistry and Endodontology, School of Dentistry, Health Sciences University of Hokkaido
- P33.** Reparative Dentin Formation by Phosphophoryn-Collagen Composite in rats
Toshiyuki Koike, Keisuke Handa and Takashi Saito
Division of Cariology and Endodontology, Department of Oral Rehabilitation, School of Dentistry, Health Sciences University of Hokkaido
- P34.** Effect of Ca²⁺ Concentration in Gene Expression of Angiopoietin produced in Osteoblast-like Cells
Shinya Nakamura, Takuya Matsumoto, Taiji Sohmura, Atsushi Nakahira
Graduate School of Engineering, Osaka Prefecture University, Graduate School of Dentistry, Osaka University
- P35.** Development of adhesive monomer with dentin mineralization capacity
Ito Shuichi, Okuma Kazutoyo, Saito Takashi
Department of Operative Dentistry and Endodontology, School of Dentistry, Health Sciences University of Hokkaido
- P36.** A study on autotransplantation of cultured pulp cells in bone cavity
Kaichi Matsuoka, Suguru Ohta, Eitoyo Kokubu, Morito Tsuruoka, Takashi Inoue
Tokyo Dental College Chiba Hospital; Department of Clinical Pathophysiology, Tokyo Dental College; Oral Health Science Center HRC7, Tokyo Dental College
- P37.** Localization of oral mucosal progenitor cells during mouse growing
Saneyuki Takaichi, Akihiro Ishii, Takayasu Igarashi, Han-Sung Jung, Naoshi Shinozaki, Gen-yuki Yamane
Oral Health Science Center HRC7; Department of Oral Medicine and Oral and Maxillofacial Surgery; Tokyo Dental College Cornea Center; Department of Oral and Maxillofacial Surgery, Tokyo Dental College; Department of Oral biology Div. in Anatomy and Developmental Biology, Yonsei University College of Dentistry
- P38.** Modeling oral mucosa regeneration process by laser irradiation
Akihiro Ishii
Oral Health Science Center HRC7; Dept. of Oral and Maxillofacial Surgery; Tokyo Dental College Cornea Center, Tokyo Dental College

- P39.** The mechanism of proliferation and differentiation in oral stem cell
Yasuhiro Kato
Oral Health Science Center HRC7; Tokyo Dental College Cornea Center, Tokyo Dental College
- P40.** Isolation and characterization of a side population of human oral squamous cell carcinoma cell line, Ho-1-N-1
Tetsuo Yajima
Oral Health Science Center HRC7; Department of Oral and Maxillofacial Surgery, Tokyo Dental College
- P41.** Cystatin C stimulates the osteogenic differentiation of human bone marrow mesenchymal stem cells.
Atsushi Danjo, Takayoshi Yamaza, Mizuho A Kido, Daiji Shimohira and Teruo Tanaka
Department of Oral Anatomy and Cell Biology, Kyushu University Graduate School of Dental Science
- P42.** Development of a regenerated tooth with mesenchymal tissue derived from pluripotent stem cells
Ritsuko Morita, Kazuhisa Nakao, Miho Ogawa, Kentaro Ishida, Yasumitsu Saji, Tadao Atsumi, Takashi Tsuji
Fac. of Indus. Sci. & Tech., Tokyo Univ. of Sci.; Tissue Eng. Res. Cent., Tokyo Univ. of Sci.: The Institute of Physical and Chemical Research (RIKEN)
- P43.** Identification of mesenchymal cell lines that can differentiate into tooth mesenchyme by a bioengineered organ germ method
Taro Mizutsuki, Kazuhisa Nakao, Kentaro Ishida, Ritsuko Morita, Miho Ogawa, Mayumi Murofushi, Kazuhiro Asano, Takashi Tsuji
Fac. of Indus. Sci. & Tech., Tokyo Univ. of Sci.; Tissue Eng. Res. Cent., Tokyo Univ. of Sci.
- P44.** Human tooth germ-derived mesenchymal cell: its multipotency and application for tissue engineering.
Etsuko Ikeda
Research Institute for Cell Engineering (RICE), National Institute of Advanced Industrial Science and Technology (AIST); Graduate School of Pharmaceutical Sciences, Osaka University; Fac. of Indus. Sci. & Tech., Tokyo Univ. of Sci.
- P45.** Down-regulated gene between pre- and post- natal mouse dental papilla
Hodaka Sasaki, Takashi Muramatsu, Takayasu Masaoka, Yasunobu Enokiya, Han-Sung Jung, Sadamitsu Hashimoto, Masaki Shimono
Oral Health Science Center HRC7; Department of Pathology; Department of Periodontology, Tokyo dental college; Department of Oral biology, Yonsei University
- P46.** Investigation of the developmental mechanisms in artificial tooth germ applied by bioengineered organ germ method
Miho Ogawa, Kentaro Ishida, Kazuhisa Nakao, Ritsuko Morita, Mayumi Murofushi, Takashi Tsuji
Fac. of Indus. Sci. & Tech., Tokyo Univ. of Sci.; Tissue Eng. Res. Cent., Tokyo Univ. of Sci.

- P47.** Development of a bioengineered tooth germ reconstituted by a bioengineered organ germ method in tooth cavity of adult mice
Yasumitsu Saji, Kazuhisa Nakao, Miho Ogawa, Mayumi Murofushi, Takashi Tsuji
 Fac. of Indus. Sci. & Tech., Tokyo Univ. of Sci.; Tissue Eng. Res. Cent., Tokyo Univ. of Sci.
- P48.** Cell proliferation and migration in periodontal ligament after tooth replantation
Takashi Muramatsu, Koichi Sato, Yasufumi Tsuchiya, Takayasu Masaoka, Yasunobu Enokiya, Sadamitsu Hashimoto, Masaki Shimono
 Oral Health Science Center HRC7; Department of Pathology; Department of Periodontology, Tokyo Dental College,
- P49.** Establishment and analysis of mesenchymal cell lines established from a tooth germ
Kana Kouno, Ayano Ootubo, Takashi Tuji, Yasuhiro Tomooka
 Department of Faculty of Industrial Science and Technology; Tissue Engineering Research Center, Tokyo University of Science
- P50.** Analysis of growth and differentiation of tooth germ epithelial cell lines which have tooth reconstruction capacity.
Akihiko Komine, Momoko Suenaga, Takashi Tuji, Yasuhiro Tomooka.
 Department of Biological Science and Technology; Tissue Engineering Research Center, Tokyo University of Science
- P51.** Characterization of tongue epithelial lines and induction to ameloblasts
Chiharu Fukano, Taizo Imai, Takashi Tuji, Yasuhiro Tomooka.
 Department of Biological Science and Technology; Tissue Engineering Research Center, Tokyo University of Science
- P52.** Tooth regeneration with clonal gingival epithelial cell lines of an adult mouse
Ayano Otsubo, Takashi Tuji, Yasuhiro Tomooka
 Department of Biological Science and Technology; Tissue Engineering Research Center, Tokyo University of Science
- P53.** An attempt to induce differentiation of oral epithelial cells to dental epithelial cells
Hiroyuki Yoshida, Chiho Takahashi, Takashi Tuji, Yasuhiro Tomooka
 Department of Biological Science and Technology; Tissue Engineering Research Center, Tokyo University of Science
- P54.** Possibility for intentional replantation after long term cryopreserved incisor teeth in a patient with occlusal trauma
Hideki Makimura, Nobuyuki Kikuchi, Yumiko Taguchi, Somei Chikako, Koh Kimura, Fumio Nagahama, Moriyasu Wada
 Department of Renascent Dentistry, Nihon University School of Dentistry at Matsudo

P55. Ca²⁺ transporting/signaling mechanisms mediated by sodium/calcium exchangers in rat ameloblasts

Reijiro Okumura, Takashi Muramatsu, Kan-Ichi Nakagawa, Masaki Shimono, Keiko Suzuki, Paul P. M. Schnetkamp, Yoshiyuki Shibukawa
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