

November 25th, Saturday, Main Hall

9:00-10:00 Special Lecture I

Moderator: Dr. Keiji Moriyama

(Department of Maxillofacial Orthognathics, Division of Maxillofacial and Neck Reconstruction,
Tokyo Medical and Dental University (TMDU))

SL-1 Developmental cues as a foundation for therapies

Dr. Ophir D Klein

(IADR President, Orofacial Sciences & Pediatrics, University of California, San Francisco, U.S.A.)

10:15-11:15 Special Lecture II

Moderator: Dr. Nobuhiro Takahashi

(Division of Oral Ecology and Biochemistry, Tohoku University Graduate School of Dentistry)

SL-2 Mitochondrial medicine

Dr. Takaaki Abe

(Division of Medical Science, Tohoku University Graduate School of Biomedical Engineering,
Department of Clinical Biology and Hormonal Regulation,
Tohoku University Graduate School of Medicine)

13:30-15:00 JADR / KADR Joint Symposium

“Explore the Radiant Future of Dental Research “

Organizer/ Moderator: Dr. Hiroshi Egusa

(Division of Molecular and Regenerative Prosthodontics,
Tohoku University Graduate School of Dentistry)

Dr. Chan Ho Park

(Department of Dental Biomaterials, School of Dentistry, Kyungpook National University)

JS-1 New Insights into the Molecular Mechanisms Underlying Bone Destruction and Formation

Dr. Masayuki Tsukasaki

(Department of Osteoimmunology Graduate School of Medicine and Faculty of Medicine,
The University of Tokyo)

JS-2 Epigenetic modulation of salivary gland epithelial cell for salivary gland tissue engineering

Dr. Sang-woo Lee

(Dept. of Oral Physiology, School of Dentistry, Seoul National University)

JS-3 Design of new dental biomaterials by referring bone formation processes.

Dr. Takuya Matsumoto

(Department of Biomaterials, Okayama University Graduate School of Medicine,
Dentistry and Pharmaceutical Sciences.)

JS-4 Surface Characterization of Tissue Engineering Scaffolds for Bone and Periodontal Ligament.

Dr. Chan Ho Park

(Department of Dental Biomaterials, School of Dentistry, Kyungpook National University)

15:00-16:00 Hatton Award Presentation

Moderator: Dr. Takeshi Nomura

(Department of Oral Oncology, Oral and Maxillofacial Surgery, Tokyo Dental College)

HA-1 Establishment of novel diagnostic methods for caries-induced pulpitis using MRI

Dr. Kiichi Moriyama

(Department of Restorative Dentistry and Endodontology, Osaka University Graduate School of Dentistry)

HA-2 Retinoid signaling is essential for the determination of frontonasal primordia

Dr. Lin Xu

(Department of Orthodontics and Dentofacial Orthopedics, Osaka University Graduate School of Dentistry)

HA-3 Effects of CD4+ Cytotoxic T Lymphocytes in Oral Cancer.

Dr. Hu CHEN

(Section of Oral and Maxillofacial Oncology, Division of Maxillofacial Diagnostic and Surgical Sciences,
Faculty of Dental Science, Kyushu University)

November 26th, Sunday, Main Hall

9:00-10:30 Symposium I

“New Insights in Biology of Oral Diseases “

Organizer/ Moderator: Dr. Tsuyoshi Sugiura

(Division of Oral and Maxillofacial Oncology and Surgical Sciences, Tohoku University,
Graduate School of Dentistry)

Moderator: Dr. Satoru Yamada

(Departments of Periodontology and Endodontology, Tohoku University Graduate School of Dentistry)

SI-1 Genome Analysis for Dentistry and Medicine in Tohoku Medical Megabank

Dr. Akihito Otsuki

(Tohoku University Tohoku Medical Megabank Organization)

SI-2 Non-Invasive Early Detection and Real-Time Monitoring of Oral Cancer

Dr. Tsuyoshi Sugiura

(Division of Oral and Maxillofacial Oncology and Surgical Sciences, Tohoku University,
Graduate School of Dentistry)

SI-3 Lymph node metastasis challenges and improvement of treatment effect by using lymphatic drug delivery system

Dr. Ariunbuyan Sukhbaatar

(Division of Oral and Maxillofacial Oncology and Surgical Sciences,
Graduate School of Dentistry, Tohoku University)

SI-4 Integrative epigenomic and transcriptomic analysis reveals that transcriptional factor competition at the distal enhancers of the Samd9l gene locus regulates osteoblast survival and activity in an inflammatory environment

Dr. Shigeki Suzuki

(Department of Periodontology and Endodontology, Tohoku University Graduate School of Dentistry)

10:30-11:30 Special Lecture III

Moderator: Dr. Keiji Moriyama

(Department of Maxillofacial Orthognathics, Division of Maxillofacial and Neck Reconstruction,
Tokyo Medical and Dental University (TMDU)

SL-3 Implant surface bioactivity and three interfaces to consider in tissue interaction

Dr. In-Sung Yeo

(President, Korean Division of International Association for Dental Research)

(Professor, Department of Prosthodontics, School of Dentistry and Dental Research Institute,
Seoul National University, Seoul, Korea)

11:30-12:30 Rising Scientist Session

“Immunity in Oral Disease “

Organizer/ Moderator: Dr. Satoru Yamada

(Departments of Periodontology and Endodontology, Tohoku University Graduate School of Dentistry)

- RS-1 Immune response in the interaction between periodontopathic bacteria and host cells.
Dr. Jun Ohshima
(Department of Restorative Dentistry and Endodontology, Osaka University Graduate School of Dentistry)
- RS-2 An emerging mechanism in diabetes-related periodontitis: the pathogenic role of insulin resistance in periodontal tissue
Dr. Takanori Shinjo
(Section of Periodontology, Division of Oral Rehabilitation, Faculty of Dental Science, Kyushu University)
- RS-3 MAIT Cells Exacerbate Alveolar Bone Loss in Periodontitis Associated with LAD1
Dr. Tetsuhiro Kajikawa
(Department of Periodontology and Endodontology Tohoku University Graduate School of Dentistry)

14:00-15:30 Symposium II

“Recent Advances of Skeletal Development, Regeneration and Disease “

- Organizer/ Moderator: Dr. Masahiro Saito
(Department of Restorative Dentistry Operative Dentistry, Tohoku University Graduate School of Dentistry)
Dr. Shinsuke Ohba
(Department of Tissue and Developmental Biology, Osaka University Graduate School of Dentistry)
- SII-1 Transcriptional control of skeletal development
Dr. Kenji Hata
(Department of molecular and cellular biochemistry, Osaka University Graduate School of Dentistry)
- SII-2 Identifying gene regulatory mechanisms underlying skeletal development in mouse and human models
Dr. Hironori Hojo
(Center for Disease Biology and Integrative Medicine, The University of Tokyo)
- SII-3 Bone marrow endosteal stem cells coordinate active osteogenesis and tumorigenesis in young bones
Dr. Yuki Matsushita
(Department of Cell Biology, Nagasaki University Graduate School of Biomedical Science)
- SII-4 Novel bone regeneration method using immature osteoblast-like cells and various scaffolds and its way to practical application.
Dr. Yuya Kamano
(Division of Endodontics, Tohoku University Hospital)

Poster Presentation

Behavioral, Epidemiologic and Health Services Research

001: Poor oral health and risk of weight change among independent older adults: a three-year follow-up JAGES cohort study.

C. SHIOTA¹, T. KUSAMA^{1,2}, K. TAKEUCHI^{1,2}, S. KIUCHI^{1,3}, K. KONDO^{3,4}, K. OSAKA¹

¹Department of International and Community Oral Health, Tohoku University Graduate School of Dentistry, ²Division of Statistics and Data Science, Liaison Center for Innovative Dentistry, Tohoku University Graduate School of Dentistry, ³The Frontier Research Institute for Interdisciplinary Sciences, Tohoku University, ⁴Center for Preventive Medical Sciences, Chiba University, ⁵National Center for Geriatrics and Gerontology

002: Machine learning for classification of predicting the visitors to an interactive museum

W. PONPIMONTEP, P. TUANGAM

Faculty of Dentistry, Mahidol University, Bangkok, THAILAND

003: Media development for patients with autism undergoing dental treatment

P. ADNONLA¹, P. TUANGAM², A. SANOMSRI¹, R. KAEWKALAYA¹, P. PENGKLANG¹, J. MUNSIL¹

¹Dental Hospital, Faculty of Dentistry, Mahidol University, Bangkok, THAILAND, ²Research office, Faculty of Dentistry, Mahidol University, Bangkok, Thailand

004: Two different oral hygiene measurements following a theory-based educational intervention

R. PRIHASTUTI¹, D. HINODE², M. FUKU², R. OMAR³, Y. MATSUKA¹

¹Department of Stomatognathic Function and Occlusal Reconstruction, Graduate School of Oral Sciences, Tokushima University, Tokushima, Japan, ²Department of Hygiene and Oral Health Science, Graduate School of Biomedical Sciences, Tokushima University, ³Department of International Oral Health Science Education, Graduate School of Biomedical Sciences, Tokushima University

005: The change in utilization of dental care for outpatient and home-visit among older adults during the COVID-19 pandemic in Japan: the LIFE Study.

T. KUSAMA^{1,2}, Y. TAMADA^{2,3}, S. KIUCHI^{2,4}, M. MAEDA⁵, F. MURATA⁵, H. FUKUDA⁵, K. OSAKA², K. TAKEUCHI^{1,2}

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006: Oral and cognitive function in the real world: evidence from the JAGES project

J. AIDA¹, S. KIUCHI²

¹Department of Oral Health Promotion, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, Tokyo, Japan, ²Frontier Research Institute for Interdisciplinary Sciences, Tohoku University, Sendai, Japan

Nutrition Research

007: Association between number of teeth and eating out of home among older adults

A. KINUGAWA¹, T. YAMAMOTO², T. KUSAMA^{1,3}, K. TAKEUCHI^{1,3}, K. OSAKA¹

¹Department of International and Community Oral Health, Graduate School of Dentistry, Tohoku University, Sendai, Miyagi, Japan, ²Department of Health Promotion, National Institute of Public Health, Wako, Saitama, Japan, ³Division of Statistics and Data Science, Liaison Center for Innovative Dentistry, Graduate School of Dentistry, Tohoku University, Sendai, Miyagi, Japan

Evidence-based Dentistry Network

008: Elimination of organic material in isthmus by high-frequency electric conduction

A. Alkuwaykibi, T. Sugaya

Department of Periodontology and Endodontology, Faculty of Dental Medicine, Hokkaido University-collage of dentistry, Hokkaido

Cariology Research-Fluoride & Ca-based Products

009: Remineralization effect of silver diammine fluoride and glass ionomer cement for artificial caries and natural caries under the combination usage in vitro

X. CHEN, G. INOUE, Y. SHIMADA

Cariology and Operative Dentistry, Tokyo Medical and Dental University, Tokyo, Japan

Cariology Research-Clinical & Epidemiological Studies

010: Association between short stature in first grade and permanent teeth caries in sixth grade among elementary school children in Japan: a population-based cohort study

A. SUZUKI¹, Y. MATSUYAMA², Y. TAN³, T. ANZAI⁴, A. ISUMI⁵, S. DOI⁵, T. OGAWA¹, T. FUJIWARA³, K. MORIYAMA¹

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Cariology Research-Microbiological Studies/Biofilm

011: Serum agglutinating ability of Streptococcus mutans after killing by amoxicillin

Y. SUEHIRO¹, S. MATAYOSHI¹, M. OTSUGU¹, R. NOMURA², K. NAKANO¹

¹Department of Pediatric Dentistry, Osaka University Graduate School of Dentistry, Osaka, Japan, ²Department of Pediatric Dentistry, Graduate School of Biomedical and Health Sciences, Hiroshima University, Hiroshima, Japan

Dental Materials

012: Two new denture cleansers' effects on the acrylics

P. TUANGAM¹, R. KAYPETCH¹, P. RUDRAKANJANA¹, P. TANTIVITAYAKUL²

¹Research office, Faculty of Dentistry, Mahidol University, Bangkok, Thailand, ²Department of Oral Microbiology, Faculty of Dentistry, Mahidol University, Bangkok, Thailand

Dental Materials 1: Ceramic-based Materials

013: Effect of powder size and pre-sintering temperatures on recycled zirconia

H. YANG, J.R. VANEGAS SZENZ, R.X. WANG, K.H. YANG, G. HONG

Division for Globalization Initiative, Liaison Center for Innovative Dentistry, Tohoku University Graduate School of Dentistry, Sendai, Japan

014: Adsorption affinity of metronidazole antibiotic on octacalcium phosphate material and the molecular biocompatibility

D. CHAIARIYAKUL, R. HAMAI, Y. SHIWAKU, K. TSUCHIYA, O. SUZUKI

Division of Craniofacial Function Engineering, Graduate School of Dentistry Tohoku University, Sendai, Japan

Dental Materials 2: Polymer-based Materials

015: Resin composite void: effect of techniques and materials (μ CT Evaluation)

P. SERMSOPIT¹, C. THONGCHOKCHAI¹, C. YANGYUEN¹, P. SNABBOON¹, P. KARNTIANG²

¹College of Dental Medicine, Rangsit University, ²Operative Department, College of Dental Medicine, Rangsit University

Dental Materials 3: Metal-based Materials and Other Materials

016: Dry precision polishing of pure titanium by sodium alginate bonded mounted wheel

H. SATO¹, K. TAGAMI¹, Y. KAMEYAMA¹, H. ISHIHATA², Y. TASHIRO³, S. KODAMA¹, A. MIYAKE⁴, Y. KOMASA⁴, S. KOMASA³

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Dental Materials 5: Biocompatibility, Bioengineering and Biologic Effects of Materials

017: Gentamicin-loaded carbonate apatite for prevention of surgical site infection

L. XIAO¹, J. SASAKI², H. KITAGAWA^{1,2}, G. ABE¹, R. TSUBOI³, T. KOHNO¹, S. IMAZATO^{1,2}

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Dental Materials 4: Adhesion

018: Composite resin restoration with injection technique on severe eroded teeth

G. INOUE¹, M. IKEDA², Y. SHIMADA¹

¹Department of Cariology and Operative Dentistry, Tokyo Medical and Dental University, Tokyo, Japan, ²Oral Biomedical Engineering, Tokyo Medical and Dental University, Tokyo, Japan

Dental Materials 5: Biocompatibility, Bioengineering and Biologic Effects of Materials

019: Neutral electrolyzed water-based gel easily prepared immediately before use by adding commercially available thickening food and its bactericidal effect

Y. NAGAMATSU¹, H. IKEDA¹, H. NAGAMATSU²

¹Division of Biomaterials, Department of Oral Functions, Kyushu Dental University, ²Division of

Comprehensive Dentistry, Department of Oral Functions, Kyushu Dental University

020: Trabecular bone morphologic changes during growth from material science perspective

P. SUNG, M. RANDA, M. OKADA, T. MATSUMOTO

Department of Biomaterials Graduate School of Medicine Dentistry and Pharmaceutical Science, University of Okayama, Okayama, Japan

021: Remineralization of artificial dentine caries by CAREDYNE RESTORE containing BioUnion filler

T. TAKAHASHI, D. MACHIDA, Y. SHINOZAKI

GC corporation

Education Research

022: Development of interprofessional education of nursing care and oral healthcare programs for dental and nursing students

S. HARESAKU¹, Y. UMEZAKI², T. NAITO², H. AOKI¹, M. MIYAZONO¹, M. MIYOSHI¹, M. MONJI¹, R. EGASHIRA², A. CHISHAKI¹

¹Department of Nursing, Fukuoka Nursing College, ²Section of Geriatric Dentistry, Department of General Dentistry, Fukuoka Dental College

Diagnostic Sciences

023: Test-retest reliability on functional MRI for salty and umami taste.

H. OTSUKA¹, H. WADA², H. MATSUMOTO², T. GOTO²

¹Tokyo Dental College, Tokyo, Japan, ²Department of Oral and Maxillofacial Radiology, Tokyo Dental College, Tokyo, Japan

Microbiology/Immunology

024: Priming effects of dectin-1 ligands on double-stranded RNA-induced production of proinflammatory cytokines and interferon (IFN)- β

R. TAMAI, Y. KIYOURA

Department of Oral Medical Science, Ohu University School of Dentistry, Fukushima, Japan

025: Association of specific *Streptococcus mutans* strains with development of non-alcoholic steatohepatitis

K. TABATA, S. NAKA, S. NAKANO, M. MATSUMOTO-NAKANO

Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences

026: Collagen-binding protein pathogenicity in rat model of IgA nephropathy

K. SUEHARA¹, D. MATSUOKA¹, S. NAKA¹, T. MISAKI², Y. NAGASAWA³, S. ITO⁴, R. NOMURA⁵, K. NAKANO⁶, M. MATSUMOTO-NAKANO¹

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027: Effects of butyrate on morphology and proliferation of OSCC cells

G. HUANG^{1,2}, J. WASHIO¹, H. OTANI¹, N. TAKAHASHI¹

¹Division of Oral Ecology and Biochemistry, Graduate School of Dentistry, Tohoku University, Sendai, Japan, ²Sichuan university, Chengdu, China.

028: Antimicrobial effect of green tea catechins on periodontal disease-associated bacteria

M. HIGUCHI, Y. ABIKO, J. WASHIO, N. TAKAHASHI

Division of Oral Ecology and Biochemistry, Tohoku University Graduate School of Dentistry, Sendai, Japan

029: Profiling of microbiota of bottled beverages: storage under different temperatures

A. WAKUI^{1,2}, M. KAWACHI¹, Y. ABIKO³, J. WASHIO³, T. SATO¹

¹Division of Clinical Chemistry, Niigata University Graduate School of Health Sciences, Niigata, Japan, ²Department of Medical Technology, Niigata University of Health and Welfare, Niigata, Japan, ³Division of Oral Ecology and Biochemistry, Tohoku University Graduate School of Dentistry, Sendai, Japan

Periodontal Research-Therapy

030: Establishment of pulp revascularization in the mouse model

X.T. WANG, S. SUZUKI, S. Yamada

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Mineralized Tissue

031: Effects of bone broth on osteoporosis prevention

Y. SEKI¹, R. OHKUMA², Y. MIYAKAWA³, T. KARAKIDA², R. YAMAMOTO², Y. YAMAKOSHI²

¹Fourth-year student, School of Dental Medicine, Tsurumi University, Yokohama, Japan, ²Department of Biochemistry and Molecular Biology, School of Dental Medicine, Tsurumi University, Yokohama, Japan, ³Department of Pediatric Dentistry, School of Dental Medicine, Tsurumi University, Yokohama, Japan

032: IL-6 regulates orthodontic tooth movement and pain

T. ONO¹, N. TOYAMA^{1,2}, T. ONO², T. NAKASHIMA¹

¹Department of Cell Signaling, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University (TMDU), Tokyo, Japan, ²Department of Orthodontic Science, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University (TMDU), Tokyo, Japan

033: Distinctive behavior of trabecular bone during growth and degeneration

A. KAMADA¹, R. MUSA², P. SUNG², M. OKADA², T. MATSUMOTO²

¹Dental School, Okayama University, Okayama, Japan, ²Department of Biomaterials, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, Okayama, Japan

034: Time course evaluations of trabecular bone morphology in femur epiphysis

R. MUSA, P. SUNG, M. OKADA, T. MATSUMOTO

Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences

035: TiO₂ nanotube mediates human osteoblast-like cell proliferation and differentiation

A. MA, J. CHEN, G. HONG

Graduate of dentistry, Tohoku University, Sendai, Japan

Neuroscience

036: Effectiveness of music on sleep bruxism, stress and sleep quality

N. HOSIRILUCK, M. KUERTIOWITTAYA, W. KREESURADEJ, S. PRAYONGPAN,
T. ITTHIKUL, S. MITRIRATTANAKUL
Department of Masticatory Science, Faculty of Dentistry, Mahidol University

037: Antinociception of cannabidiol on temporomandibular osteoarthritis pain in mice

A. WANASUNTRONWONG¹, T. ARAYAPISIT², W. SUPRONSINCHAI³
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²Department of Anatomy, Faculty of Dentistry, Mahidol University, Bangkok, Thailand, ³Department
of Physiology, Faculty of Dentistry, Chulalongkorn University, Bangkok, Thailand

038: Sleep bruxism in Thai obstructive sleep apnea patients

N. KAO-NGAMPANICH¹, N. HOSIRILUCK¹, N. TRIPRATEEPSILP², S. PHOLSIRIPATHOM²,
N. CHATCHAIYAN¹
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Orthodontics Research

039: Involvement of osteocyte necroptosis on osteoclastogenesis during orthodontic tooth movement

F. OHORI¹, H. KITaura¹, T. NOGUCHI¹, A. MARAHLEH^{1,2}, J. MA¹, K. KANOU¹, M. MIURA¹,
J. REN¹, K. NARITA¹, I. MIZOGUCHI¹
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Dentistry, ²Frontier Research Institute for Interdisciplinary Sciences Tohoku University

Pediatric Oral Health Research

040: Periapical abscess occurrence in children with X-linked hypophosphatemia rickets

M. TAKAGI, S. MATAYOSHI, R. OKAWA, K. NAKANO
Department of Pediatric Dentistry, Osaka University Graduate School of Dentistry, Japan

041: Nationwide survey of hypophosphatasia in Japan conducted in 2023

M. OCHIAI, T. KADOTA, R. OKAWA, K. NAKANO
Department of Pediatric Dentistry, Osaka University of Graduate School of Dentistry, Japan

Implantology

042: Analysis of principal strains in peri-implant bone under occlusal loads

R. STEGAROIU¹, K. KUROKAWA¹, Y. ARAI², Y. YAMAZAKI², S. TANAKA³
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Sciences, Niigata, Japan, ²Oral Implant Clinic, Niigata University Medical & Dental Hospital, Niigata,
Japan, ³Bioengineering Laboratory, Kanazawa University Institute of Science and Engineering,
Kanazawa, Japan

Prosthodontics

043: Prosthesis use and functional capacity among Japanese older adults: a three-year follow-up JAGES cohort study

M. NAKAGAWA¹, S. KIUCHI^{1,2}, K. TAKEUCHI¹, T. KUSAMA¹, K. OSAKA¹, K. KONDO^{3,4},

H. EGUSA¹

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Periodontal Research-Diagnosis/Epidemiology

044: The role of Piezo1 pathway on cementocyte functions

K. XIONG^{1,2}, L. CHEN¹, Y. SAKISAKA¹, S. SUZUKI¹, T. TENKUMO³, E. NEMOTO¹, S. YAMADA¹

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Periodontal Research-Pathogenesis

045: BSP-RGD modulates gene expression and glucose-metabolism in mice periodontal tissue.

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Periodontal Research-Diagnosis/Epidemiology

046: Using convolutional neural network for classification of 3-wall intrabony defects

K. PIROONSAN, K. TANSRIRATANAWONG

Department of oral medicine and periodontology, Faculty of dentistry, Mahidol university, Bangkok, Thailand

Periodontal Research-Pathogenesis

047: Non-synergistic interaction between periodontal pathogens and *Ccl2* in periodontitis progression

C. FUJIHARA, S. MURAKAMI

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048: Characterization of a novel transcriptional regulator of *Treponema denticola*

R. HISANAGA^{1,2}, Y. KITAMURA¹, K. YAMASHITA¹, A. SAITO^{1,2}, K. ISHIHARA^{2,3}

¹Department of Periodontology, Tokyo Dental College, Tokyo, Japan, ²Oral Health Science Center, Tokyo Dental College, Tokyo, Japan, ³Department of Microbiology, Tokyo Dental College, Tokyo, Japan

Periodontal Research-Therapy

049: Serine 536 of NF- κ B is a new regulator of bone resorption in periodontitis

T. AOKI¹, E. JIMI^{2,3}, M. MATSUDA², F. NISHIMURA¹

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University, Fukuoka, Japan, ²Laboratory of Molecular and Cellular Biochemistry, Faculty of Dental Science, Kyushu University, Fukuoka, Japan, ³Oral Health / Brain Health / Total Health Research Center, Faculty of Dental Science, Kyushu University, Fukuoka, Japan

050: Hypoxic condition enhances osteogenic differentiation in aged periodontal ligament cells.

K. TANSRIRATANAWONG, S. JAIKLAEW

Oral Medicine and Periodontology, Faculty of Dentistry, Mahidol University, Thailand

051: Development of allogeneic stem cell therapy for periodontal tissue regeneration: analysis of cell fate after transplantation

M. TAKEDACHI¹, K. KAWAKAMI¹, K. KAWASAKI¹, K. SAWADA¹, M. MURATA², C. MORIMOTO¹, A. SUGIMOTO¹, T. IWAYAMA¹, M. KITAMURA¹, S. MURAKAMI¹

¹Department of Periodontology and Regenerative Dentistry, Osaka University Graduate School of Dentistry, Suita Japan, ²Department of Interdisciplinary Dentistry, Osaka University Dental Hospital

052: Overexpression of SGLT2 and VCAM-1 in the kidney of a *P. gingivalis* LPS-induced diabetic nephropathy mouse

K. KOICHIRO¹, S. YOSHIHIKO², T. SACHIO¹

¹Section of Orthodontics, Fukuoka Dental College, Fukuoka, Japan, ²Department of Oral Function & Anatomy, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan

Microbiology/Immunology

053: Proteomic analysis of *Candida dubliniensis* biofilms with overexpression of an aryl alcohol dehydrogenase

P. Tsang

Technological and Higher Education Institute of Hong Kong, Hong Kong

Periodontal Research-Therapy

054: Biological effects of recombinant collagen peptide on cultured human periosteal cells

T. DIEP¹, N. TAKAHASHI¹, T. TSUZUNO², M. NAGATA², K. TABETA¹

¹Division of Periodontology, Niigata University Graduate School of Medical and Dental Sciences, ²Division of Pioneering Advanced Therapeutics, Niigata University Medical and Dental Hospital

055: Exosomes from human periodontal ligament stem cells promote bone healing

S. ALBUGHA¹, H. SUGII¹, A. TOMOKIYO³, S. HAMANO^{1,4}, D. HASEGAWA², S. YOSHIDA², J. OBATA¹, T. ITOYAMA², H. KANEKO², M. KADOWAKI², K. KINOSHITA², F. MINOWA¹, H. MAEDA^{1,2}

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056: Novel macrolide mitigate alveolar bone loss and enhance bone regeneration in periodontitis

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057: Characterization of Sparc1 as a novel cementoblastic protein
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058: RMND5A involvement in periodontal tissue homeostasis
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Periodontal Research-Pathogenesis

059: Analysis of periodontal MAIT cells using the ligature-induced periodontitis model
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Pulp Biology and Regeneration

060: Impact of glutamine-transporter during wound-healing in rat pulpotomized model
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061: Wound-healing mechanism after pulpotomy in Type 1 and 2 Diabetes-mellitus-rats
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062: Establishment of novel diagnostic methods for caries-induced pulpitis using MRI
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Stem Cell Biology

063: Floating culture attenuates circadian rhythms during osteogenic differentiation of iPSCs
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064: A new 3-D culture model to regenerate bone organ
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065: Synergistic role of retinoid and Gata3 signaling for embryonic nasal epithelium

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066: Mechanical cues regulate the chondrogenic differentiation of iPS-cell embryoid bodies

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Salivary Research

067: Inhibitory effects of saliva on SARS-CoV-2 and influenza viral infections by improving oral hygiene

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068: Association between salivary cytokines and microbiome of palmoplantar pustulosis patients.

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069: Characterization of large extracellular vesicles from oral fluid

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JADR Travel Award

070: Cerium oxide nanozyme-empowered polymer improves micro-environment of oral facial prosthesis.

U. Mangal, J. JIN, J. KWON, S. CHOI

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071: Keratin-coated titanium enhances osteoblast function and bone healing.

E. Ranjit, S. HAMLET, A. SHARMA, R. LOVE

Griffith University, Gold Coast, Queensland, Australia

Dental Materials

072: Substrate stiffness regulates cell viability and proliferation in HSC-4 oral squamous carcinoma cells

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