Contents

Hiroshima University faculty of Dentistry, Hiroshima University Hospital, Graduate School of Biomedical Sciences

○Program for Biomedical Research, Division of Molecular Medical Science
  • Department of Biomaterials Science 1
  • Department of Dental and Medical Biochemistry 4
  • Department of Oral Biology 6
  • Department of Bacteriology 9

○Program for Biomedical Research, Division of Integrated Medical Science
  • Department of Oral Physiology 13
  • Department of Dental Pharmacology 15

○Program for Biomedical Research, Division of Frontier Medical Science
  • Department of Oral and Maxillofacial Pathobiology 19
  • Department of Periodontal Medicine, and Periodontics and Endodontics 28

○Programs for Applied Biomedicine, Division of Medical Intelligence and Informatics
  • Department of Mucosal Immunology and Preventive Dentistry 34
  • Department of Oral and Maxillofacial Radiology, and Oral and Maxillofacial Radiology 37

○Programs for Applied Biomedicine, Division of Critical Medical Science
  • Department of Oral Growth and Developmental Biology 41
  • Department of Dental Anesthesiology, and Dental Anesthesiology 43

○Programs for Applied Biomedicine, Division of Cervico-Gnathostomatology
  • Department of Dental Science for Health Promotion, and Operative and Esthetic Dentistry 46
  • Department of Advanced Prosthodontics, Implants and Prosthodontics 52
  • Department of Prosthetic Dentistry, and Prosthetic Dentistry 58
  • Department of Orthodontics and Craniofacial Developmental Biology, and Orthodontics 63
  • Department of Pediatric Dentistry, Pediatric Dentistry 75

○School of Oral Health Science, Division of Oral Health Science
  • Department of Oral Health Research 80
  • Department of Team Care for Oral Health 83
  • Department of Oral Health Management 86

○School of Oral Health Science, Division of Oral Health Engineering
· Department of Oral Basic Science 90
· Department of Biomaterial Engineering 92
· Department of Medical Design & Engineering 97
○ Central research laboratory 99
○ Department of General Dentistry, General Dentistry 101
○ Department of Oral Health and Development, Preventive Dentistry 105
○ Department of Oral Health and Development, Special Care Dentistry 108
○ Central Clinical Sections, Special Dental Clinic Section 110
○ Central Clinical Sections, Center of Oral Clinical Examination 111
○ Central Clinical Sections, Dental Technicians Section 117
○ Central Clinical Sections, Dental Hygien Section 119
○ Dental Clinical 121
○ Dental Medical Information Section 123
Program for Biomedical Research, Division of Molecular Medical Science
(Department of Biomaterials Science)

(1) Staffs and Students

Professor: Masayuki Okazaki
Associate Professor: Kunio Wakasa
Research Associate: Yuji Nomura, Isao Hirata
Graduate Student: Ryo Nishikiori, Kohei Masuki, Yoshiko Sonoda, Tomomi Hayashida

(2) Main Research Activities

1: Development of functional biomaterials with adhesion molecules
2: Biocompatibility of apatite-collagen composites
3: Interaction between living system and biomaterials with self-assembled monolayers
4: Dynamics of dentine adhesion interface
5: Mechanical properties of visible light-cured resin fillers
6: Bioassay of endocrine disruptor chemicals
7: Mechanism of molecular-level tooth adhesion
8: Improvement of implant surface
9: Synthesis and polymerization of multi-functional monomers
10: Casting of glass ceramics

(3) Research Achievements

A) Original Papers (including Case Reports)

B) Review


C) Publications


D) Other Publications

E) Presentation at Scientific Meeting


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: Research Project, Grant-in-Aid for Scientific Research (B) (Continued): Okazaki M.: Affinity chemical treatment and function control of carboxyapatite-collagen composite scaffold: (No.18390515), ¥ 1,900,000

2: Research Project, Grant-in-Aid for Scientific Research (C) (Continued): Nomura Y.: A study about the endocrine disruptor activity evaluation of dentistry materials by the amphibians docimasy: (No.19592239), ¥ 800,000

3: Research Project, Grant-in-Aid for Young Scientists (B) (New): Hirata I.: Development of functionalized titanium implant with cytokine immobilization: (No.20791467), ¥ 1,800,000

(5) Academic Awards, etc.


(6) Patents

Program for Biomedical Research, Division of Molecular Medical Science
(Department of Dental and Medical Biochemistry)

(1) Staffs and Students

Professor: Yukio Kato
Associate Professor: Mitsuhide Noshiro
Research Associate: Takeshi Kawamoto, Katsumi Fujimoto
Graduate Student: Taichi Ueshima
International Student: Tania Saskianti
Secretary: Misano Kuramoto

(2) Main Research Activities

1: Basic and clinical aspects of mesenchymal stem cells
2: Differentiation of chondrocytes
3: Molecular clocks
4: We cloned novel bHLH transcription factors (Dec1 and Dec2), which play roles in differentiation of mesenchymal stem cells (MSC) into chondrocytes, adipocytes, myoblasts and osteoblasts. Furthermore, Dec1 and 2 are involved in core feed back loops of the transcriptional and translational control in molecular clock systems (Honda-S et al. Nature, 2002). In addition, we developed the super-expansion method for MSC and found many molecular markers for MSC.

(3) Research Achievements

A) Original Papers (including Case Reports)

4: DEC1 modulates the circadian phase of clock gene expression. - Nakashima A, Kawamoto T, Honda


B) Review

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting

1: HYALURONAN-degrading Capability and Multipotency of Synovial Fibroblasts in Comparison with Bone Marrow Mesenchymal Stem Cells and Skin Fibroblasts.: Yukio Kato: 13TH CONGRESS OF THE ASIA PACIFIC LEAGUE OF ASSOCIATIONS FOR RHEUMATOLOGY 9.23-27, 2007, Yokohama City

2: Roles of DEC1 and DEC2 in the core loop of the molecular clock outputs to proliferation and differentiation.: Yukio Kato: The 6th Annual Meeting for the Japanese Association for Cancer and Hypoxia Research 11.29-30, 2007, Hiroshima-City

(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

(5) Academic Awards, etc.

(6) Patents
Program for Biomedical Research, 
Division of Molecular Medical Science 
(Department of Oral Biology)

(1) Staff and Students

教授 : Takashi Uchida
助教 : Shinji Hiyama, Mineo Watanabe

(2) Main Research Activities

1: Morphological and molecular biological studies of the amelogenesis
2: Molecular biological and morphological studies of the mechanism of bone metabolism
3: Referred pain involved with inflammatory cytokines on orofacial regions

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications

D) Other Publications
E) Presentation at Scientific Meeting


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.
1 : Hiroshima University Research Grant for Young Researchers : Hiyama, S. : The role of estrogen and its target genes on the bone turnover and the niche of the stem cell. : 1,000,000yen.
Program for Biomedical Research, Division of Molecular Medical Science  
(Department of Bacteriology)

The study of infectious disease is a constantly challenging field that deals with the emergence and reemergence of diseases as threats to human beings, and drug resistance of bacteria through combat in host-parasite interaction. The research into the basic molecular mechanisms by which bacteria cause disease and become resistant to certain antimicrobial drug is essential for the development of new therapeutic interventions. Molecular bacterial pathogenesis, biogenesis and regulation of cell wall metabolism, and molecular aspect of host-parasite interaction are the research focus of our group of laboratory of bacteriology. Our work concentrates on human pathogens such as Staphylococcus aureus, Pseudomonas aeruginosa, and oral pathogens Aggregatibacter actinomycetemcomitans, oral streptococci and other oral pathogens.

Undergraduate areas of study
A major in Oral Microbiology is designed to offer you concise and comprehensive guide to understand microbiological principles and essential knowledge about microbes present in oral region. You will learn the role of bacteria, virus and fungus in diseases, including etiology of caries, periodontal diseases and other infectious diseases relevant to dentistry. We also participate in some courses, basic immunology, clinical cariology, periodontal medicine, and laboratory medicine.

Topics
We recently started genomic approach to understand pathogenicity and drug resistance mechanism of S. aureus. We are in collaboration with peoples in genome informatics lab. analyzing and evaluating thousands of genes in certain pathogenic strains by comparative genomic hybridization using microarray. We are also interested in regulation mechanism of gene expression in the bacteria infecting host and keen to know how bacterial genes are coordinately regulated by multiple regulators.

(1) Faculty members and students

Professor : Motoyuki Sugai  
Research Associate : Tamaki Fujiwara, Fuminori Kato  
Graduate Student : Shima Morioka D3, Panida Thaniarsrisung D3, Natsumi Fujiwara M2, Hiroaki Fujimoto M2, Akihiro Nishimoto M2, Ryuichi Kuwabara M1  
Research Technician: Naomi Saeki, Naomi Kida, Natsumi Fujiwara

(2) Main Research Interests
1: Research on peptidoglycan hydrolases
2: Drug resistance mechanism of MRSA and molecular epidemiology
3: Research on bacterial toxins modifying signal transduction
4: Functional study of virulence factors of periodontopathogenic bacteria
5: Comparative genomic analysis of staphylococci
6: Gene expression analysis of S. aureus

(3) Research Accomplishments

A) Original Papers (including Case Reports)


B) Reviews


C) Books


D) Other Publications
E) Presentation at Scientific Meeting


2: The role of host lytic enzyme for phagic infection.: Symposium “Revival of bacteriophage”.: Fujiwara T.: 81th Annual meeting for Japanese Society for Bacteriology (Kyoto).


5: Genetic analysis of mobile element containing blaIMP-1 integronic cassette derived from In113.: Kouda S, Ohara M, Sugai M.: 78th Japanese Society for Infectious Diseases Western branch (Hiroshima).


F) Invited speakers, Symposist and others


2: The role of host lytic enzyme for phagic infection.: Symposium “Revival of bacteriophage”.: Fujiwara T.: 81th Annual meeting for Japanese Society for Bacteriology (Kyoto).


(4) Research grants.


(5) Awards

(6) Patents

1: Sugai M, Komatsuzawa H : Bactericide against Streptococcus mutans and Streptococcus sobrinus (pat. Appl. to US, No. 10/583, 127)

2: Sugai M, Komatsuzawa H : Bactericide against Streptococcus mutans and Streptococcus sobrinus (pat. Appl. to NZ, No. 548511)
Program for Biomedical Research, Division of Integrated Medical Science
(Department of Oral Physiology)

(1) Staffs and Students

Professor: Yoshiki Shiba
Associate Professor: Chikara Hirono
Assistant Professor: Makoto Sugita
Research Associate: Yoshiko Iwasa
Graduate Students: Takane Maruyama, Machiko Inoue

(2) Main Research Activities

1: Study on function and regulation of taste organs and salivary glands
2: Molecular physiological study on function of ion channels and ion transporters
3: Study on the mechanism of taste perception
4: Study on the role of cell communication in proliferation and differentiation of oral mucosa.
5: Study on mastication and swallowing

(3) Research Achievements

A) Original Papers (including Case Reports)

1: Suppression of carbachol-induced oscillatory Cl− secretion by forskolin in rat parotid and
2: Involvement of cytoskeletal integrity in the regulation of Cl− and amylase secretion from rat parotid
3: Irsogladine maleate counters the interleukin-1 beta-induced suppression in gap-junctional
intercellular communication but does not affect the interleukin-1 beta-induced zonula occludens
protein-1 levels in human gingival epithelial cells: Fujita, T., Ashikaga, A., Shiba, H., Kajiya, M.,
Periodontal Res. 43, 96-102. 2008.

B) Review

C) Publications

1: Basic Physiology for Dental Students (Morimoto, T., Yamada, Y., Eds.): Shiba, Y.: Ishiyaku

D) Other Publications

E) Presentation at Scientific Meeting


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: JST (PRESTO): Sugita, M., The neuronal mechanisms underlying the taste-evoked behavioral and emotional responses, ¥7,000,000.

(5) Academic Awards, etc.

(6) Patents
Program for Biomedical Research, Division of Integrated Medical Science
(Department of Dental Pharmacology)

(1) Staffs and Students

Professor: Toshihiro Dohi
Associate professor: Katsuya Morita
Assistant professor: Tomoya Kitayama, Hiroko Oka
Graduate student: Koki Kifune

(2) Main Research Activities

1: Regulation by cyclic ADP-ribose of intracellular Ca^{2+} dynamics and cellular functions.
2: Physiological and pathophysiological roles of neurotransmitter transporters and nucleoside transporters.
3: Studies on the mechanisms for neuropathic pain and the development of novel medicaments.
4: Application of neural progenitor cells for therapy of oral dysfunctions.

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review


C) Publications

D) Other Publications

E) Presentation at Scientific Meeting


3: Alternative splicing regulates the expression and function of the catecholamine transporters: Sogawa


12:Brain-derived neurotrophic factor (BDNF) mediates the onset of neuropathic pain: Motoyama N., Morita K., Kitayama T., Nishimura F. and Dohi T.: The 47th Scientific Meeting of Hiroshima Prefecture Dental Association; The 92th Ordinary Meeting of Hiroshima University Dental Society (Hiroshima), 2008.


E) Presentation at Scientific Meeting


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1:Grant-in Aid for Scientific Research (B) continuance: Dohi T., The molecular mechanism of development of allodynia and new drug development. Project number 18390491. Amount 2,210,000.

2:Grant-in Aid for Scientific Research (C) continuance: Mitsuhata C., Effects of endocrine disorders on developing dopaminergic system in brain. Project number 19592354. Amount 1,950,000

3:Grant-in-Aid for Young Scientists (B) continuance: Kitayama T., Development of neuroregeneration therapy on disease of oral area. Project number 19791365. Amount 1,820,000

4: Grant-in-Aid for Young Scientists (B): Oka H., Study of the pain control mechanism in the oral and maxillofacial region mediated by specific component cells of the periodontal tissue. Project number 20791352. Amount 2,340,000

(5) Academic Awards


(6) Patents
Program for Biomedical Research, Division of Frontier Medical Science
(Department of Oral and Maxillofacial Pathobiology)

(1) Staffs and Students

Professor: Takashi Takata
Associate Professor: Mutsumi Miyauchi
Assistant Professor: Yasusei Kudo
Research Associate: Shojiro Kitajima
Graduate Student: Shinji Iizuka, Kiyako Sakamoto, B.S.M. Samadarani Siriwardena, Yusuke Kawazoe, Mohammad Reza Keikhaee, Guangying Qi, Maki Yoshida, Elsayed Deraz, Hisako Furusho

(2) Main Research Activities

1: Molecular pathological study on proliferation and development of oral squamous cell carcinoma
2: Experimental pathological study on the mechanism of regeneration of periodontal tissues
3: Experimental pathological study on the mechanism of destruction of periodontal tissues
4: Study on the criteria of diagnosis and cellular differentiation of odontogenic tumors and salivary gland tumors

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review


C) Publications


D) Other Publications


E) Presentation at Scientific Meeting


12: Periostin plays a role in invasion and metastasis in oral cancer: Siriwardena BSMS, Kudo Y, Ogawa I, Kitajima S, Miyauchi M, Takata T.: The 41st meeting of Hiroshima University Dental


26: Influence of elevation of γ-glutamyl transpeptidase by cholestatic liver disease on bone
24


41: A case of inflammatory gingival hyperplasia with pseudomalignant change arising in lower


F) Special lectures in academic meetings


3: Special Lecture: Regulation of cell division by proteolysis and the roles of abnormal regulation of
proteolysis for carcinogenesis. : Kudo Y. : The 7th Tumor Meeting in Minami Kyushu (Kagoshima), 2008.


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1 : Grants-in-Aid for Scientific Research (Grant-in-Aid for Young Scientists (A)) New : Yasusei Kudo : Abnormal regulation of APC/C ubiquitin ligase complex inhibitor Emi1 and its role for carcinogenesis. (No.20689033) . ¥13,520,000

2 : Grants-in-Aid for Scientific Research (Grant-in-Aid for Exploratory Research) Continue : Yasusei Kudo : Function of newly identified invasion related factor of oral cancer and application of them for diagnosis. (No.19659481) . ¥1,400,000

3 : Grants-in-Aid for Scientific Research (Grant-in-Aid for Young Scientists (B)) New : Shojiro Kitajima : Regulation of Aurora-A stabilization by phosphorylation and its abnormal regulation in oral cancer. (No.2079133800) . 2,210,000

4 : Grants-in-Aid for Scientific Research (Grant-in-Aid for JSPS Fellows) New : Shinji Iizuka : The study of bone regeneration by using Ameloblastin synthetic peptides. (No. 20・1351) . ¥600,000

5 : Grants-in-Aid for Scientific Research (Grant-in-Aid for JSPS Fellows) New : Guangying Qi : Overexpression of Survivin and Aurora-B and their roles in oral cancer: (No. 20・3632) . ¥600,000


7 : Takeda Science Foundation. Grand for Medical Science in 2008 New : Yasusei Kudo : Abnormal regulation of APC/C ubiquitin ligase complex inhibitor Emi1 and its role for carcinogenesis. ¥2,000,000


9 : Trustee research expenses (Seikagaku corporation) New : Takashi Takata : Study on bone regeneration using heparin and heparin-derivatives. ¥1,050,000

10 : Donated fund (Seikagaku corporation) New : Takashi Takata : Research on Emdogein. ¥500,000

11 : Trustee research expenses (Ito Co. Ltd.) New : Takashi Takata : Effects of ultrasound-application to periodontal tissue. ¥500,000

12 : Donated fund (Mitsubishi-Mihara Hospital) Continuance : Takashi Takata : Study on diagnosis for oral disease. ¥135,000

13 : Donated fund (Clinical laboratory center, Hiroshima city medical association) Continuance : Takashi Takata : Study on diagnosis for oral disease. ¥200,000

14 : Trustee research expenses (Earth chemical Co. Ltd.) New : Takashi Takata : Effects of polyphosphate on cytokines production caused by LPS from periodontal pathogen. ¥1,300,000
(5) Academic Awards, etc.

1: Samadarani Siriwardena: Encouragement Award at The 41st meeting of Hiroshima University Dental Society
2: Guangying Qi: Encouragement Award at The 41st meeting of Hiroshima University Dental Society
3: Takaaki Tsunamatsu: Best Poster Presentation Award for undergraduate student at 50th Japanese association for Oral Biology
4: Maki Yoshida: Best Poster Presentation Award at 50th Japanese association for Oral Biology
5: Yasusei Kudo: Encouragement Research Award of Japanese Society of Pathology at The 54th Autumn Special Meeting of the Japanese Society of Pathology

(6) Patents
Program for Department of Periodontal Medicine, Division of Frontier Medical Science and Department of Preventive and Restorative dentistry (Periodontics and Endodontics)

(1) Staffs and Students

Professor: Hidemi Kurihara
Associate Professor: Hiroyuki Kawaguchi
Research Associate: Hideki Shiba
Assistant: Takamune Hino, Naohiko Hasegawa, Noriyoshi Mizuno, Tsuyoshi Fujita, Yuushi Uchida, Katsuhiro Takeda, Tomoyuki Iwata, Koichi Hayashida, Miyuki Niitani
Resident: Noriko Tsunekuni, Yasuto Kawamura, Fumino Ogawa
Graduate Student: Yasuko Kitamoto, Yoriko Iwasaki, Mikihito Kajiya, Akiyoshi Kishimoto, Nobuyuki Sakai, Takayoshi Nagahara, Yoshie Niitani, Shinji Matsuda, Takeshi Ueda, Yusuke Taniguchi

(2) Main Research Activities

1: Immunological study on the onset of periodontics
2: Study on periodontal tissue regeneration using bone marrow mesenchymal stem cells
3: Study on periodontal tissue regeneration using neurotrophines
4: Study on physiological function and differentiation of the cells derived from periodontal ligament or dental pulp
5: Study on pathogenicity of periodontopathogenic bacteria
6: Study on interaction between periodontopathogenic bacteria and host cells
7: Clinical study on endodontal-periodontal therapy
8: Study on interaction between stress and periodontics

(3) Research Achievements

A) Original Papers (including Case Reports)

2: Effect of neurotrophin-4/5 on bone/cementum-related protein expressions and DNA synthesis in


B) Review


C) Publications

D) Other Publications


E) Presentation at Scientific Meeting

3: IgG-Antigen-Immune Complex Transportation across Gingival Epithelium by Neonatal Fc Receptor (FcRn) Ouhara K., Cory W. O. Ernst, Martin A. Taubman, Philip Stashenko, Kurihara H., Kawai T.: The International Association for Biological and Medical Research, (Boston,), 2008
8: Utility of bacterial examination with anaerobic culture system for samples from root canal in root canal treatment: Kitamoto Y., Hino T., Uchida Y., Shiba H., Kawaguchi H., Kurihara H.: 29th the meeting of the society of Japan endodontic association (Chiba), 2008


23: Development of a newly medical device for periodontal tissue regeneration using Brain-derived neurotrophic factor/hyaluronic acid complex—Effects of root debridement—: Sakai N., Takeda K.,


F) Special lectures in academic meetings

1: Periodontal tissue regeneration by mesenchymal stem cell: Kawaguchi H., Kurihara H.: Symposium 'Hard tissue materials-regeneration of periodontal tissue and alveoler bone', The 30th Meeting of the Japanese society for biomaterials (Tokyo), 2008


(4) Status of Receiving Grants-in Aid for Scientific Research.


(5) Academic Awards, etc.

(6) Patents
Programs for Applied Biomedicine, Division of Medical Intelligence and Informatics (Department of Mucosal Immunology and Preventive Dentistry)

(1) Staffs

Professor: Ichiro Takahashi
Associate Professor: Kei Tobiume
Research Associate: Atsushi Shimazu, Kazuko Kawahara, Keiko Tsuruda

(2) Main Research Activities

1: Immunobiological analysis of the mucosal immune system
2: Molecular analysis of cell death

(3) Research Achievements

A) Original Papers


B) Review

1. Induction of IgA production by NKG2D ligands. Shimazu A., Tsuruda K.: Clinical Immunology &
C) Presentation at Scientific Meeting


D) Other Publications

E) Presentations


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: Grant for the Basic Science (C) from the Ministry of Education, Science, Sports, and Culture. : K. Kawahara: Analysis of stress-inducible MICA expression in the periodontal tissue derived cells. (No.18592280) ¥ 2, 800, 000.

2: Grant for the Basic Science (C) from the Ministry of Education, Science, Sports, and Culture. : A.
Shimazu: Involvement of stress-inducible MICA in periodontal diseases. (No.20592456)  ¥ 3,500,000.


(5) Academic Awards, etc.

(6) Patents
Programs for Applied Biomedicine, Division of Medical Intelligence and Informatics

(Department of Oral and Maxillofacial Radiology)

Oral and Maxillofacial Radiology

(1) Staffs and Students

Professor: Keiji Tanimoto
Associate Professor: Minoru Fujita
Assistant Professor: Akira Taguchi, Yoshikazu Suei, Takashi Nakamoto
Assistant Professor: Toshikazu Nagasaki, Masahiko Ohtsuka, Masahiko Sawajiri
Resident: Masaru Konishi
Graduate Student: Samir Banik, Masaru Konishi, Yukimi Yasuhara, Yuri Fujiwara, Takeo Nakashima, Pipop Sutthiprapaporn

(2) Main Research Activities

1: Radiographic classification of simple bone cyst of the jaw
2: Radiographic study of osteomyelitis of the jaw
3: Measurement of bone mineral density of the jaws by quantitative computed tomography
4: Early detection of postmenopausal women with osteoporosis by panoramic radiographs
5: Influence of osteoporosis on oral health
6: Effect of vitamin D and estrogen receptor gene polymorphisms on the jaw bones
7: Influence of oral health on cardiovascular diseases
8: Early detection of elderly with atherosclerosis by dental radiographs
9: Effects of medication for osteoporosis on oral health
10: Study on the swallowing using medical imaging
11: Magnetoencephalography Study on the higher brain function of swallowing
12: Research on interstitial brachytherapy for oral cancer

(3) Research Achievements

A) Original Papers (including Case Reports)

2: Detection of post-menopausal women with low bone mineral density and elevated biochemical


B) Review

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting


4: Are panoramic radiographs useful for the evaluation of bone quality in screening for


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: Grant-in-aid for scientific research from the Japan Society for the Promotion of Science : Nakamoto T, Computer aided diagnosis system to screen for osteoporosis based on trabecular pattern of jaw. (no. 18791381). ¥2,100,000

2: Grant-in-aid for scientific research from the Japan Society for the Promotion of Science: Sawajiri M : Radioprotective assay on bone metabolism with Japanese Medaka (Oryzias latipes). ( no. 20592201) ¥4,040,000

3: Grant-in-aid for scientific research (C) Nagasaki T: Therapeutic research for the dysphagic patient with dementia, using Magnetoencephalography and Neuro Fiber Tractgraphy, (No.20592202). ¥3,380,000

(5) Academic Awards, etc.
(6) Patents
Programs for Applied Biomedicine, Division of Clinical Medical Science (Department of Oral Growth and Developmental Biology)

(1) Staffs and Students

Professor: Maeda Norihiko
Associate Professor: Yoshiko Yuji
Research Associate: Minamizaki Tomoko, Yoshioka Hirotaka
Researcher: Suzuki Sayaka
Student: Kma Yoshiaki, Kitaura Yoshiaki

(2) Main Research Activities

1: Study on the development and aging in the masticatory system
2: Study on the neurogenesis in the brain
3: Studies on cell fate choice and plasticity in osteoblast-lineage cells
4: Studies on the molecular mechanisms of bone formation and mineralization
5: Study on the molecular mechanisms of tooth formation and mineralization

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

1: New Insights into the Roles of Fibroblast Growth Factor 23. Yoshiko Y, Minamizaki T, Maeda N.

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: Grant-in-Aid for Scientific Research: Y. Yoshiko: (No. 20592139) ¥1,690,000, 2008
2: Grant from Raffinee International Cooperation: Y. Yoshiko: ¥3,600,000, 2008
3: Grant-in-Aid for Scientific Research: T. Minamizaki: (No. 19890140) ¥1,340,000, 2007
4: Grant from Hiroshima University: H. Yoshioka ¥1,000,000

(5) Academic Awards, etc.

(6) Patents

Introduction of Department of Growth and Developmental Biology

[Education]

Our educational program consists of lectures and the practical exercise on histology of the human body, and oral anatomy mainly focusing the mastication.

[Research]

We mainly focus on the following research subjects.

1: Study on the development and aging in the masticatory system
2: Study on the neurogenesis in the brain
3: Study on cell the fate choice and plasticity in osteoblast-lineage cells
4: Study on the molecular mechanisms of bone formation and mineralization
5: Study on the molecular mechanisms of tooth formation and mineralization

The final goal of our research is to contribute to the high quality of the human life in the world. So, we collaborate on the research not only with some research groups of other universities and research institutes in Japan but also with the research group of the University of Toronto in Canada.
Programs for Applied Biomedicine, Division of Clinical Medical Science (Department of Dental Anesthesiology, and Dental Anesthesiology)

(1) Staffs and Students

Professor : Irifune Masahiro, D.D.S., Ph.D.
Graduate Student : Mukai Akari, D.D.S., Miyahara Takeshi, D.D.S.

(2) Main Research Activities

1: Study on mechanisms of general anesthetic action
2: Study on a stage of delirium in general anesthesia
3: Study on antianxiety effects of sedative drugs
4: Effects of nitrous oxide on cardiovascular system
5: Study on chronic pain
6: Study on efficacy of chest compressions in cardiopulmonary resuscitation
7: Acute medicine for emergency during dental treatments

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting


9: The role of Substance P in immobility as one of anesthetic components - effect of pentobarbital on


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: Grant-in-Aid No. 20592373 for Scientific Research (C) from the Ministry of Education, Culture, Sports, Science, and Technology of Japan (New): Irifune M: The role of Substance P in antinociception and immobility as general anesthetic components, ¥4,000,000.

2: Grant-in-Aid No. 20791524 for Young Scientists (B) from the Ministry of Education, Culture, Sports, Science, and Technology of Japan (New): Doi M: Possibility of symptom specificity for patients with intractable chronic pain, and quantitative evaluation of sociopsychological factors –MEG and f-MRI-, ¥3,200,000.

(5) Academic Awards, etc.

(6) Patents
Programs for Applied Biomedicine, Division of Cervico-Gnathostomatolgy (Department of Dental Science for Health Promotion) Operative and Esthetic Dentistry

(1) Staffs and Students

Professor: Fusanori Nishimura
Associate Professor: Morioki Fujitani
Assistant Professor: Masashi Fujii
Research Associate: Ryo Oda, Kenichi Shirai, Takahiro Harima, Makoto Arakawa, Satoki Shibata, Naoyo Motoyama, Akiko Yamashita
Graduate Student: Misaki Iwashita, Sonoko Kumamoto, Junko Yonehiro, Yuuki Jinnin, Hideo Nakarai, Sakiko Fujii

(2) Main Research Activities

1: Studies on host factors associated with caries susceptibility
2: Studies on relationship between dental disease and systematic diseases
3: Studies on association between nutrients and dental diseases
4: Development of new laboratory tests for diagnosis of dental diseases
5: Development of new preventive therapies for dental diseases based on new laboratory tests
6: Development of biocompatible materials and their clinical application
7: Pathology of discolored teeth and development of new therapy
8: Development of new host-noninvasive therapies using lasers
9: Biological regeneration of dentin/pulp complex

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications


2: §4. Infectious diseases 1. Pathogenesis of periodontal diseases and related trait; Oral Medicine
D) Other Publications


3: Special issue II. New research era on periodontitis and treatment strategy 「Re-evaluating the association between periodontitis and systemic health」; Inflammation and Immunity: Nishimura F.: 16, 60-64, 2008.


8: Periodontitis is a life-style-related disease: Nishimura F.: Asahi Medical, 8, 28-29, 2008.

E) Presentation at Scientific Meeting


3: Cytokine array analysis of molecules produced from macrophage-adipocyte co-cultures


10: Dentin siloprotein and dentin phosphoprotein have specific roles in dentin mineralization: Suzuki S.: The 86th International Association for Dental Research (Toronto), 2-5, July, 2008.


17: Brain-derived neurotrophic factor (BDNF) mediates the onset of neuropathic pain: Motoyama N., Morita K., Kitayama T., Nishimura F., Dohi T.: The 47th Scientific Meeting of Hiroshima
Prefecture Dental Association; The 92th Ordinary Meeting of Hiroshima University Dental Society (Hiroshima), 19, October, 2008.


F) Special lectures in academic meetings


5: The periodontal host response with metabolic syndrome: Nishimura F.: The International Symposium on “Oral Sciences to Improve the Quality of Life” (Tokushima), 6, September, 2008.


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: Grant-in-Aid for Exploratory Research: Nishimura F., Elucidation of the association between nutrition and caries susceptibility. No. 20659298. ¥1,600,000

2: Grant-in-Aid for Scientific Research (C): Shirai K., Development of adhesive system with capacity of self-repair applied by Sr-CaPO4 complex. No. 20592227. ¥1,500,000 (¥450,000)

3: Entrusted Accounting (Shofu Co., Ltd) : Nishimura F. ¥500,000

4: Grant-in-Aid for Young Scientist (Start-up): Yamashita A., The baseline and clinical study of relationship between periodontal disease and metabolic syndrome. No20890143.¥1,742,000

(5) Academic Awards, etc.
(6) Patents
Programs for Applied Biomedicine, Division of Cervico-Gnathostomatology
( Department of Advanced Prosthodontics )
Implants and Prosthodontics

(1) Staffs and Students

Professor : Yasumasa Akagawa
Associate Professor : Kazuhiro Tsuga, Takayasu Kubo
Assistant Professor : Yasuhiko Abe, Tsuyoshi Taji, Kyou Hiasa
Research Associate : Katsunori Koretake, Mineka Yoshikawa, Kazuya Doi
Secretary : Rinko Kurumi
Resident : Maho Takeuchi, Kazuhiko Hayashi, Yasunari Miyamoto
Clinical Trainee : Takahisa Kawamura, Koji Morita
Graduate Student : Yayoi Kanehisa, Mariko Maruyama, Ryo Takeshita
Research Student : Yuri Utanohara

(2) Main Research Activities

1: Development and clinical application of new materials for oral implants.
2: Development of "bio-hybrid" artificial bone made of interconnected porous hydroxyapatite and mesenchymal stem cells.
3: Elucidation of the effect of FGF on bone formation surrounding oral implants.
4: Biomechanics analysis of oral implants, prostheses and their surrounding bone.
5: Elucidation of the effect of prostodontic treatments on the quality of life of elderly people.
6: Elucidation of the effect of prostheses on swallowing function of elderly people.
7: Development and clinical application of functional oral rehabilitation utilizing tongue pressure measurement.

(3) Research Achievements

A) Original Papers (including Case Reports)

3: Influence of static overload on the bony interface around implants in dogs : Miyamoto Y, Koretake K,


B) Review

C) Publications


D) Other Publications


E) Presentation at Scientific Meeting


7: Effect of combined application of bFGF and inorganic polyphosphate on bioactivities of osteoblasts and initial bone regeneration: Takeshita R, Yuan Q, Kubo T, Doi K, Morita K and Akagawa Y: The 41st Annual Meeting of Hiroshima University Dental Society (Hiroshima), 2008.


11: A handy manometric evaluation of swallowing-related tongue function: Kawamura, T., Tsuga, K.,


F) Special lectures in academic meetings


5: Considering dental medical care in Japan, A role of a joint care improving health of national


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: Grant-in Aid for scientific Research (B) from the Ministry of Education, Culture, Sports, Science and Technology, Japan : Akagawa Y : Development of new implant augmentation GBR using a intelligent gelatin hydrogel – bFGF complex. (Grant No. 19390498) . ¥8,970,000

2: Grant-in Aid for exploratory Research from the Ministry of Education, Culture, Sports, Science and Technology, Japan : Akagawa Y : Molecular biological approach for the relationship between loss of dental occlusion and progress of Alzheimer’s dementia. (Grant No. 19659508) . ¥900,000

3: Grant-in Aid for scientific Research (C) from the Ministry of Education, Culture, Sports, Science and Technology, Japan : Tsuga K, A new multifactorial functional evaluation for enhancing anti aging effects of prosthetic treatments. (Grant No.20592269) . ¥2,600,000

4: Grant-in Aid for scientific Research (C) from the Ministry of Education, Culture, Sports, Science and Technology, Japan : Taji T, A development of occlusal support index for removable partial denture design. (Grant No. 20592270) . ¥1,95,000

5: Grant-in Aid for scientific Research (C) from the Ministry of Education, Culture, Sports, Science and Technology, Japan : Hisaka K, Development of multiphysics simulator to high intelligent implant diagnosis and treatment systems. (Grant No. 18592129) . ¥1,950,000

6: Grant-in Aid for Young scientists (B) from the Ministry of Education, Culture, Sports, Science and Technology, Japan : Koretake K, The new method of bone regeneration by bone modeling at adding implant. (Grant No. 19791443) . ¥1,430,000

7: Grant-in Aid for Young scientists (B) from the Ministry of Education, Culture, Sports, Science and Technology, Japan : Yoshikawa M, Anti-aging on swallowing function by maintenance and restoration of occlusion. (Grant No.19791442) . ¥1,430,000

8: Grant-in Aid for Young scientists (B) from the Ministry of Education, Culture, Sports, Science and Technology, Japan : Doi K : Jaw-bone regeneration technique using intelligent artificial bone. (Grant No. 20791428). ¥2,210,000

9: Grant-in Aid for Longevity science total research from the Ministry of Health, Labour and Welfare, Japan : Establishment of oral care and management. (Grant No. KOSE202001) . ¥3,430,000
(5) Academic Awards, etc.

1: Yoshikawa M: The 19th annual meeting of Japanese society for mastication science and health promotion Best poster award

(6) Patents
Programs for Applied Biomedicine Division of Cervico-Gnathostomatology
(Department of Advanced Prosthodontics)
Department of Preventive and Restorative Dentistry
(Implants and Prosthodontics)

(1) Staffs and Students

Professor: Taizo Hamada (Until March)
Associate Professor: Shinsuke Sadmori
Assistant Professor: Hitoshi Abekura (in the university), Masahiro Nishimura (in the university)
Assistant: Shunji Inoue, Hong Guang, Kazuko Kagawa
Secretary: Michiko Miyagawa
Resident: Kae Harada, Syouji Hyashi
Intern: Fumio Suehiro, Kouji Kamata (Until March), Tsuka Hiroki (Until March), Masahiro Tsuboi (Until March), Isami Fujiwara, Tomoharu Hori
Graduate Student: Li YingAi (Until March), Fumio Suehiro (Until March), Kentaro Hayashida (Until March), Takeshi Maeda, Wataru Mizumachi, Syouji Hyashi, Kouji Kamata, Tsuka Hiroki, Masahiro Tsuboi, Dhirinuru (From October)
Registered Intern: Masami Furuebisu, Yutaka Fukanogi, Isami Fujiwara (Until March)

(2) Main Research Activities

1. Molecular analysis of transcription factors on mesenchymal stem cells osteogenesis
2. Geriatric Dentistry (Elderly with Dementia)
3. Psychiatric Disorders in Dental Practice
4. Development of Denture Adhesive
5. Rheology and Development of Resilient Denture Liners
7. Development of low invasive alveolar ridge augmentation method
8. Studies of conservative treatments for Temporomandibular Disfunction
9. Studies on adhesive technique for short span bridge prosthesis and mobilized tooth splint

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review


C) Publications


D) Other Publications

E) Presentation at Scientific Meeting

1: Strict selection of transcription factors involved in mesenchymal stem cells osteogenesis: Suehiro F., Nishimura M., Kamada K., Tsuboi M., Sekiya K., Sadamori S., Hamada T.: 86th IADR


6: Influence that addition of the PMMA gives to viscoelasticity of trial tissue conditioners: T. Maeda, G. Hong, S. Sadamori, T. Hamada: The 51th Japanese Society for Dental Materials and Devices (Yokohama), 2008.4.26


9: The 117th Scientific Meeting of Japan Prosthodontic Society (Nagoya), 2008. 6.7


Prosthoedontic Society Kyushu, Chugoku&Shikoku Branches (Beppu), 2008. 8.30


21: Examination of Feeding Status, Physical and Mental Status of elderly with Dementia-Follow-up Study after One Year- : Hayashi S, Sadamori S, Inoue S, Furuebisu M: The 9th Scientific Meeting of Japanese Society for Dementia Care(Kagawa), 2008. 9.27


F) Special lectures in academic meetings

1: Alveolar ridge augmentation using alveolar bone mesenchymal stem cells: NishimuraM, First meeting of Academy of Prosthetic and Regenerative Sciences: Nagoya, 2008.11.28

2: Selection of new transcription factors of human mesenchymal stem cells toward osteogenetic differentiation.: Suehiro F.: 18th, 2008.7.12

3: Clinics of the adhesion bridge: Hitoshi Abekura: The 486th meeting of dental technology (Department of Dental Technology, School of Dentistry, Aichi Gakuin University), 2008. 9.11
(4) Status of Receiving Grants-in-Aid for Scientific Research, etc.

1: Grant-in-Aid for Scientific Research (B): Nishimura M, Development of alveloar ridge augmentaion using autologous cells. assignment number 19390497. 3,600 thousand yen
2: Grant-in-Aid for Scientific Research (C): Inoue S, Exploration of stem cells suitable for alveolar ridge augmentation from oral tissue. assignment number 18592128. 910 thousand yen
3: Chugoku Industrial Innovation Center, New Industry Developing Grant: Nishimura M, Development of alveloar ridge augmentation technique using MSC for dental implantation. assignment number . 1,000 thousand yen
4: Donation for research: Nishimura M, Development of new scaffold for bone regeneration. assignment number -. 250 thousand yen
5: Grant for Industrial Creation by Hiroshima Prefecture: Nishimura M, Development of new scaffold for bone regeneration. assignment number -. 915 thousand yen
6: Grant-in-Aid for Scientific Research (C): Kagawa K, assignment number 19592238. 1,200 thousand yen
7: Grant-in-Aid for Young Scientists (B): Hong G, assignment number 19791441. 1,100 thousand yen
8: Grant for Scientific Research from the Japan China Medical Association: Hong G, Research on the salivation of trial crude drug combination denture adhesives . 1,000 thousand yen
9: Grant-in-Aid for Scientific Research (C): Abekura H, assignment number 19592242. 1,000 thousand yen

(5) Academic Awards, etc.

1: Fumio Suehiro: The 117th Scientific Meeting of Japan Prosthodontic Society Oral presentation Award: 2008. 6.8
4: Shouji Hyashi: 9th Japanese Society for Dementia Care Ishizaki Prize: 2008. 9.27
5: Masahiro Nishimura: Excellent Young Investigator Award at The 3rd International Symposium for Interface Oral Health Science in Sendai: 2009. 1.16

(6) Patents
Programs for Applied Biomedicine, Division of Cervico-Gnathostomatologist,
(Department of Orthodontics and Craniofacial Developmental Biology
Orthodontics)

(1) Staffs and students

Professor : Kazuo Tanne
Associate Professor : Eiji Tanaka (Tokushima University from April)
Assistant Professor : Toshitsugu Kawata, Hiroshi Ueda
Research Associate : Koutarou Tanimoto, Tadashi Fujita, Nobuaki Tanaka, Junji Ohtani, Masato Kaku, Masahide Motokawa
Resident : Yuiko Tohma, Mika Nishi, Nobuhiko Kawai
Intern : Myongsun Koh, Takuro Hasegawa, Youhei Suekawa, Masako Tai, Yuki Tanne, Eizou Yamano, Ryouko Yamamoto,
Professor (part-time) : Kazuhiro Ueki, Toshitsugu Kojima, Hiroharu Tsuka, Hiroshi Hanaoka, Kunimichi Souma, Hideo Kinami(未)
Registered Intern : Kuniaki Tanaka, Kouichi Ohmyou, Kazuo Hashimoto, Keisuke Tsutsui, Masashi Ueki, Hiroko Kamada, Reiko Kitamura, Tamami Yanagida
Dental Hygienist : Miho Okada, Atsuko Wakita

(2) Main academic activity

1: Viscoelastic property of temporomandibular joint disks.
2: Effects of growth factors on the proliferation and differentiation of condylar cartilage and the disk cells.
3: Biomechanical investigation of TMJ loading and assessment of lubricating function.
4: Mechanisms of pain transmission during experimental tooth movement and clarification of pain control.
5: Changes in stomatognathic functions from orthodontic surgery.
6: Association between nasal respiratory disturbances and craniofacial morphology and masticatory and respiratory functions.
7: Influences of mechanical stimuli on the proliferation and differentiation of chondrocytes.
8: Clarification of PDL regeneration mechanism.
9: Metabolism of hyaluronan in TMJ synovial fluid.
10: Influences of food consistency on neuropathological changes in the cerebral cortex.
11: Regeneration of bone and cartilage with mesenchymal stem cells.
12: Control mechanism of bone growth and development with sex hormone.

(3) Research achievement

A) Original article

11: Effects of fluoride on the interactions between amelogenin and apatite crystals: Tanimoto K., Le T.,


B) Review


C) Books


D) Other publications

E) Presentation at Scientific Meeting


9: Influence of oral appliance for the treatment of obstructive sleep apnea on occlusal function: Watanabe G., Horihata A., Ueda H., Tanne K.: 2nd Joint Meeting of the Korean Association of


20: Oral administration of liposomal lactoferrin inhibits periodontal tissue destruction in rat lipopolysaccharide-induced periodontitis. The third report: Inhibitory effects of lactoferrin on

68


Research (Koriyama), 2008.
44: Clinical survey of patients with malocclusions treated in Orthodontic Clinic, Hiroshima University Hospital for the past 40 years: Nakamura S., Kawai N., Yamano E., Inubushi T., Ueda H., Tanne K.: 51st Annual Meeting of Chu-Shikoku Orthodontic Society (Fukuyama), 2008.


60: Stability of self-drilling screw under various conditions examined by histomorphometric study: Sunagawa H., Ohtani J., Marquez R.A., Fujita T., Kawata T., Kaku M., Tohma Y., Motokawa M.,


F) Academic society symposium and special lecture


4: Biting or chewing is to train the brain everyday: To take a good care of teeth and bite well with the teeth would lead to the prevention of dimensia: Tanne K.: Hiroshima prefecture dental association, The 100th anniversary memorial lecture, (Hiroshima), 2008.

5: To learn from the patients introduced or transferred to Hiroshima University Hospital: Tanne K.: Hiroshima association of orthodontics academic lecture, (Hiroshima), 2008.

6: Communication between oral cavity and general body and the professional approach: To take a good care of teeth and bite well with the teeth would lead to brain activation: Tanne K.: H2O Hiroshima University faculty of dentistry open lecture for high school student, (Hiroshima), 2008.
7: An active and healthy life by maintaining oral health, Reconsider an importance of dental medicine on general health: Bite well by your own teeth and train the brain: Tanne K.: Hiroshima University faculty of dentistry open lecture, (Matsuyama), 2008.


11: Application of mesenchymal stem cells to maxillary bone regeneration in patients with cleft lip and palate: Tanimoto K.: 4th meeting of collaboration research for “QOL” from dental field; category of “bioengineering” (Hiroshima) 2008.


(4) Scientific research grant -in-aid

1 : Research Project: Tanne K., Association of nose obstruction and breathing mode with lateral soft tissue profile in children. 64,000 yen

2 : Grant-in-Aid for Scientific Research: Tanne K., Biological responses of mandibular cartilage layers to external stimuli and teh association with progressive condylar resorption. No.20390523. 7,540,000 yen

3 : Grant-in-Aid for Scientific Research: Tanimoto K., Clarification of the onset mechanism of amelogenesis imperfecta (AI) using an enamel biomineralization model. No.20390522. 2,600,000 yen

4 : Grant-in-Aid for Scientific Research: Ueda H., Clinical application of a new oral appliance aiming less side effects in the dentition for obstructive sleep apnea patients. No.20592403. 3200000 yen

5 : Grant-in-Aid for Scientific Research: Tanimoto K., Regeneration of bone and cartilage by use of mesenchymal stem cells, and its application to the treatment of patients with cleft palate. No.19659540. 1,900,000 yen

6 : Grant-in-Aid for Scientific Research: Fujita T., Effects of sex hormone on TMD. No.20791577. 1,950,000 yen

7 : Grant-in-Aid for Scientific Research: Tanaka N., Elucidation of the aging mechanism and the medical treatment for anti-aging in gingival fibroblast. No.20791578. 2,500,000 yen

8 : Grant-in-Aid for Scientific Research: Motokawa M., Analysis of function of VEGF receptor and investigation of inhibitional effects of VEGF receptor antibody to bone resorption. No.
20791576. 1,600,000 yen
9 : Grant-in-Aid for Scientific Research: Kaku M., Analysis of VEGF receptor function for osteoblast differentiation. No.19791580. 1,900,000 yen
10 : Grant-in-Aid for Scientific Research: Ohtani J., Effects of sex hormone and growth factors on the craniofacial skeletal development. No.19890139. 1,755,000 yen
11 : Grant-in-Aid for Scientific Research: Kawai N., Influence of food consistency on the maxillary bone and masticatory muscle development. No.19890138. 1,729,000 yen
12 : Grant-in-Aid for Clinical Research: Tanne K., Application of low-intensity ultrasound for promoting the healing of bone and periodontal tissues in the craniofacial area. 500,000 yen
13 : Industry-academia collaboration research:Tanimoto K., Application of low-intensity pulsed ultrasound to the treatment of temporomandibular disorders. 1,000,000 yen
14 : Regional innovation create total assistant project : Tanaka E., Application of low-intensity pulsed ultrasound to the treatment of temporomandibular disorders.

(5) Commendation

1: Kaku M.: Cryopreservation of PDL cells by use of program freezer with magnetic field for teeth banking: Poster award: 2nd Joint Meeting of the Korean Association of Orthodontists and the Japanese Orthodontic Society (Seoul, South Korea), 2008.
4: Tanne K.: H20 Prize giving of Hiroshima University Presidents, 2008
5: Inubushi T.: Low-intensity ultrasound stimulation inhibits resorption of the tooth root.: in vitro and in vivo study: 41st Annual Meeting of Hiroshima University Dental Society (Hiroshima), 2008
8: Kamiya T: Hiroshima University excellent student scholar ship, 2008.

(6) Patents
Programs for Applied Biomedicine, Division of Cervico-Gnathostomatology
(Department of Pediatric Dentistry)
Pediatric Dentistry

(1) Staffs and Students

Professor : Katsuyuki Kozai
Associate Professor : Junji Suzuki
Research Associate : Yasutaka Kaihara, Fumiko Hayashi, Chieko Mitsuhata, Ryuiji Mizuno (~July)
Goh Yoshimura, Noriko Kadomoto (April~), Meiko Kuramoto (August~)
Physician : Noriko Kadomoto (~March), Meiko Kuramoto (April~June)
Kozue Miura, Mihaya Ariki, Satoko Otani, Nami Miyake
Intern : Yukari Ohara (~March)
Graduate Student : Meiko Kuramoto (~March), Aya Tsuboi, Yukari Ohara (April~)
Research Student : Kaori Saiga, Ryoko Hirata, Ayako Banshoudani, Mie Hirakawa
Registered Intern : Mami Yamashiro

(2) Main Research Activities

1 : Automutanolysin in oral streptococci
2 : Research in oral bacteria especially staphlococcus aureus in children
3 : Effect of PG agonist differentiation of osteoblast
4 : Molecular analysis of cell-cell communication in differentiation of osteoblast
5 : Bacteriological and epidemiological research in periodontal diseases in children
6 : Development of oral ultra-small sized scanner for recording of oral condition
7 : Behavior evaluation of psychological stress in dental treatment in children
8 : Transmission of mutans streptococci, seeking for anti-cariogenic substance from natural foods and
denaturalization of tooth by low pH beverage

(3) Research Achievements

A) Original Papers (including Case Reports)

3 : Study of the Dental plaque in children mouth which take on yellow-brown color: Yoshimura G,


B) Review

C) Publications


D) Other Publications


2 : Guidance to support young children who are anxious about how to eat. -Proposal from Dentistry-(pamphlet), Kozai K., Working group conference committee of regional dental health medical treatment promotion), Hiroshima Prefecture Dental Hygiene Liaison Council, Japanese, 2008.


4 : Educational Guidance for Dental Medicine(2007 revision), Kozai K. (Committee of Experts,
section of clinical dentistry, and field of Pediatric Dentistry), and edit: The Council of the President of Dental University and Dean of School of Dentistry, ishiyaku Publisher Inc, 161-166, Japanese, 2008.

E) Presentation at Scientific Meeting


10: Novel role of lipopolysaccharide derived from Aggregatibacter actinomycetemcomitans in periodontitis: Kuramoto M., Suzuki J., Kozai K: The 86th General Session & Exhibition of the
IADR(Toronto), 2008.


F) Special lectures in academic meetings


6 : Mechanism and Prevention of Dental Caries. Open seminar for senior high-school students in Hiroshima Prefecture. The 4th lecture room in Faculty of Dentistry, Hiroshima University, 2008.


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: Grant-in-Aid for Scientific Research (B): Kozai K.: Resolution of mechanism of transmission of periodontitis related bacterial strains in children and development of prevention from adult periodontitis. ¥2,200,000

2: Grant-in-aid scientific research (C) : Suzuki J.: Unknown virulence factors produced by periodontal pathogen. (No.18592236). ¥600,000

3: Grant-in-Aid for Scientific Research(C) : Mitsuhata C.: Effects of endocrine disorders on developing dopaminergic system in Brain. (No.19592354). ¥1,500,000

4: Grant-in-Aid for Scientific Research from the Ministry of Education, Science, Sports and Culture of Japan (B) : Goh Yoshimura : Probability of the Order-made treatment, analyzed of Biofilm of children’s mouths. (No.19791581). ¥1000,000

5: Fostering Project of Junior Researcher, Junior Researcher of Kasumi campus/ Experimental Research : Yoshimura G: Research and Development of the simple evaluation system of microorganisms of oral cavity and the effective preventive method. ¥200,000

6: Grant-in-Aid of Futoku-kai: 2008: Kadomoto N.: ¥300,000 yen

7: Hiroshima University Educational research: Investigation on eating habits of elementary school children.:Hayashi F.: ¥96,000 yen

(5) Academic Awards, etc.


(6) Patents
School of Oral Health Science, Division of Oral Health Science (Department of Oral Health Research)

(1) Staffs and Students

Professor : Masaru Sugiyama
Assistant Professor : Maki Noso

(2) Main Research Activities

1: Study on the association of oral microorganisms with development of oral lesions and their characteristics.
2: Study on what oral health at school should be like

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications

D) Other Publications

1: Application of CAD/CAM and Rapid Prototyping in Dentistry: Murayama T, Eguchi T, Tamamoto

E) Presentation at Scientific Meeting


10. Multi-media Assistance on Studing Patient Reception and Medical Interview -The Efficacy of Self-checking on Roll-playing Practice by Movie: Takemoto T, Niitani Y, Matsumoto A, Hara K,


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

(5) Academic Awards, etc.

(6) Patents
School of Oral Health Science, Division of Oral Health Science

(Department of Team Care for Oral Health)

(1) Staff and Students

Professor : AMANO Hideaki
Assistant Professor : HARA Kumiko

(2) Specialized Fields

1 : Clinical research of the growth and development of dento-maxilofacial complex in children
2 : Study on the Dentistry for children and disabilities
3 : Study on the activation of the function of salivary glands
4 : Study on the methods for Oral health care
5 : Study on the education program for Oral health
6 : Study on education program for graduate dental hygienists

(3) Achievements

A) Original Papers (including Case Reports)


B) Reviews


C) Books

D) Other Publications


E) Presentations


9: Training of the research ability through an extracurricular activity (Biotechnology Club: Bitec) in Hiroshima University Faculty of Dentistry : Mine Y., Nikawa H., Makihira S., Shimoe S., Tamamoto M., Satoda T., Murayama T., Amano H., Takemoto T., Sugiyama M., Hara K.


F) Lectures


G) Social Contributions

1: Program for kids from elementary schools, Dental Kids, “Let’s Be a Dentist!”: Hiroshima University Faculty of Dentistry, 2008.

2: Program for high school students, Dental Kids: Hiroshima University Faculty of Dentistry, 2008.

(4) Grant-in-Aid for Scientific Research


(5) Awards

(6) Patents
School of Oral Health Science, Division of Oral Health Science
(Department of Oral Health Management)

(1) Staffs and Students

Professor: Toshinobu Takemoto
Associate professor: Atsue Matsumoto
Assistant professor: Yoshie Nitani

(2) Main Research Activities

1: Dental hygienists education
2: Research about halitosis
3: Periodontal health management
4: Oral relaxation method
5: Relation between saliva flow and emotion
6: Education about counseling
7: Infection control in dentistry

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications

D) Other Publications

1: [Application of CAD/CAM and Rapid Prototyping in Dentistry][ja]: Murayama T, Eguchi T,
E) Presentation at Scientific Meeting


9: [Research about male dental hygienists in Japan- Investigation to the dentists in Hiroshima
Prefecture.][ja]: Imari N., Takemoto T.: 92nd Meeting of Hiroshima University Dental Society, 47th Meeting of Hiroshima Prefecture Dental Association (Hiroshima), 2008.


12: [One case of dry mouth which improved by salivary grand-massage.][ja]: Hara K., Matsumoto A., Amano H.: The 15th annual meeting of the Japanese Society of Dental Welfare (Hiroshima), 2008


F) Lectures


4: [The career design of students in the Oral Health Science Course, Hiroshima University Faculty of Dentistry][ja]: Matsumoto A., Annual meeting of Hiroshima Association of Dental Hygienist Education (Hiroshima), 2008.

5: [Dental co-staff education in Europe][ja]: Takemoto T., Annual meeting of Hiroshima Association of Dental Hygienist Education (Hiroshima), 2008.


G) Social Contributions

1: Program for kids from elementary schools, Dental Kids, “Let’s Be a Dentist!”: Hiroshima University Faculty of Dentistry, 2008.

2: Program for high school students, Dental Kids: Hiroshima University Faculty of Dentistry, 2008.

4: Project team committee for the new life-long training : Matsumoto A. Japan Dental Hygienists’ Association (Tokyo) 2008.

5: Member of Dental Hygienists’ Examination committee: Matsumoto A. : Foundation of Promoting Dental Care and Training, 2008.


7: Member in the committee of National University Hospital infection control association: Niitani Y., 2008


9: Member of dental hygienists authorization committee: Matsumoto A., Japan Dental Hygienists’ Association, 2008.


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

(5) Academic Awards, etc.

(6) Patents
School of Oral Health Science, Division of Oral Health Engineering
(Department of Oral Basic Science)

(1) Staffs and Students

Professor : Takahiro Satoda
Assistant Professor : Saiji Shimoe

(2) Main Research Activities

1: Development of Effective model for anatomy education
2: Morphological Research on masticatory neuronal network
3: Study on bonding prosthetic materials to dental alloys
4: Study on effective denture marking for individual identification
5: Study on dental materials for esthetic

(3) Research Achievements

A) Original Papers (including Case Reports)

1: Influence of Endopeduncular nucleus stimulation upon Electromiogram Activity of Masticatory

B) Review

C) Publications


D) Other Publications

1: The introduction of functional anatomical models to the teaching of biology for senior high school
students(2). : Hiroshima University The annals of Educational Research 36, 405-408, 2008.
E) Presentation at Scientific Meeting


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

(5) Academic Awards, etc.

(6) Patents
School of Oral Health Science, Division of Oral Health Engineering (Department of Biomaterial Engineering)

(1) Staffs and Students

Professor : Takeshi Murayama
Associate Professor : Mitsuhiro Tamamoto
Graduation Research Students : Kozue Miyamoto, Ai Miyoshi, Takuya Kihara, Hironori Manabe, Moe Yanagibashi, Kazuki Tatehata, Keita Yauchi, Sakie Fujita, Yuta Takumi, Daigo Tomonari, Mana Kawakami, Shougo Iwaguro, Harumi Kaneishi

(2) Main Research Activities

1: Application of CAD/CAM and rapid prototyping to dentistry
2: Concurrent engineering in dentistry
3: 3d-modeling and computer simulation in dentistry
4: Development and clinical application of maxillofacial prosthetic apparatus for treatment and protection
5: Study on esthetic dentistry
6: Study on dental education
7: Health monitoring system using wearable sensors involved in a denture
8: Analysis of dental techniques using sensors
9: Simulation-based analysis of work processes in dental technology
10: Study on sports dentistry (mouthguard)
11: Study on musical dentistry (adapter)

(3) Research Achievements

A) Original Papers (including Case Reports)

3 : Application of three-dimensional model for oral and maxillofacial surgery: Kouji Ohta, Masahiko Minami, Masaaki Takechi, Masayuki Take, Miwa Mayauchi, Koichiro Higashikawa, Yoshiaki Ninomiya, Hiroshi Shimase, Shigeihiro Ono, Hideo Shigeishi, Hiromi Nishi, Seicho Makihira, Mitsuhiro Tamamoto, Saiji Shimoe, Maki Nosō, Takeshi Murayama, Takahiro Satoda, Hiroki Nikawa,
Nobuyuki Kamata: The Journal of Hiroshima University Dental Society, 40, 50-61, 2008


B) Review

C) Publications


D) Other Publications


E) Presentation at Scientific Meeting


4: Investigation and analysis of requirements for abutment teeth and development of a system for evaluating abutment teeth: Yanagibashi M, Murayama T, Tamamoto M, Shimo S, Makihira S, Satoda T, Nikawa H: 4th International Congress of Dental Technology (30th Meeting of the Nippon


F) Special lectures in academic meetings


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1 : JST Potentiality Verification Stage : Hiroki Nikawa, Takeshi Murayama, Eiji Tanaka, Shinichi Nagasaki, et al. (Representative: Digital Solutions Inc. Kanji Ueda) , Development of FEM System using 3T-MRI and Novel Micro coil. ¥7,769,000

2 : Grant for New Industry Creation : Hiroki Nikawa, Takeshi Murayama, Eiji Tanaka, Shinichi Nagasaki, et al. (Representative: Hiroki Nikawa) , Development of System assisting Diagnosis and Surgery for Jaw and Oral Function. ¥1,000,000

3 : Regional Innovation Grant : Hiroki Nikawa, Takeshi Murayama, Eiji Tanaka, Shinichi Nagasaki, et al. (Representative: Digital Solutions Inc. Kanji Ueda) , Development of System assisting Diagnosis and Treatment of Joints by FEM Analysis. ¥33,360,000

(5) Academic Awards, etc.
(6) Patents
School of Oral Health Science, Division of Oral Health Engineering 
(Department of Medical Design & Engineering)

(1) Staffs and Students

Professor : Hiroki Nikawa
Associate Professor : Seicho Makihira
Secretary : Miki Onji
Research Assistant : Kaori Taguchi

(2) Main Research Activities

1: Mechanisms on allergy caused by dental materials 
2: Study on candidal biofilms and denture plaque
3: Study on dental caries and probiotics
4: Design for cationic antimicrobial peptides
5: Study on large-scale proliferation of the mesenchymal stem cells using antimicrobial peptides
6: Study on mechanisms of the alveolar bone resorption
7: Study on bone resorption inhibitors
8: Study on dental implant materials

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications
D) Other Publications

E) Presentation at Scientific Meeting


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

(5) Academic Awards, etc.

(6) Patents
Central research laboratory

(1) Staffs and Students

Director : Norihiko Maeda (by-work)
Research Associate : Ikue Hayashi

(2) Main Research Activities

1 : Proteomics approach for interest targets in eukaryotic cells
2 : Structural analysis of biologically active substances

(3) Research Achievements

A) Original Papers (including Case Reports)

B) Review

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting


(4) Status of Receiving Grants-in-Aid for Scientific Research, etc.

(5) Academic Awards, etc.

(6) Patents
Department of General Dentistry, General Dentistry

(1) Staffs and Students

Professor : Tetsuji Ogawa
Associate Professor : Norihiro Taguchi
Assistant Professor : Yoshihara Tanaka, Masaru Ohara
Secretary : Tomoe Sasaki

(Ⅱ) Vice President of Hospital : Tetsuji Ogawa

(2) Main Research Activities

1: Research in patient-centred dentistry based on narrative approach
2: Research in general dentistry
3: Examination of postgraduate dental training program
4: Research in health communication strategy
5: Research in clinical education
6: Research in assessment of clinical skills
7: Research in development and standardization of Simulated Patients

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications

1: Coaching: Actual Medical Interview in Dental Practice. Ed. Ito T and Teranaka T. Ogawa T. Quintessence, Tokyo, 2008. 46－50


D) Other Publications

E) Presentation at Scientific Meeting


7: Medical Interview for Elderly Person. Taguchi N., Tanaka Y., Ohara M., Ogawa T., Doi N.,


F) Implementation of Seminars / Workshops

1: Workshop for postgraduate trainees 2008 (Hiroshima)
2: Research Seminar in General Dental Medicine 2008 (Hiroshima)

G) Lecturer・Symposium


H) Attending of Lectures, Seminars, and Workshops


I) Implementation of OSCE, CSA

1: 2nd Advanced OSCE for Postgraduate Trainees 2007-2008
2: 1st Advanced OSCE for Postgraduate Trainees 2008-2009

(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: Grant-in-Aid Scientific Research, Scientific Research (C). Taguchi N.: Behavioral Research and its Application in Denture Wearers; Can We Understand Patients’ Recognition Model? (Program No. 19592240),

(5) Academic Awards, etc.

(6) Patents
(1) Staffs and Students

Assistant Professor: Makoto Kawamura
Research Associate: Hisako Sasahara

(2) Main Research Activities

1: Behavioral science regarding oral health
2: International studies on oral health promotion
3: Studies on community dental health
4: Studies on school dental health
5: Studies on dental education
6: Studies on development of computer-aided diagnosis scheme for periodontal disease

(3) Research Achievements

A) Original Papers (including Case Reports)

7: Exploring the relationships between sense of hopelessness, worry, self-rated oral health status and


B) Reviews

C) Books/Book Chapters

D) Proceedings/Others


E) Presentations

(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: Grant-in-aid for Scientific Research(C), No.20592455, New : Kawamura M. (representative), Okada M., Taguchi N., Sasahara H., Ogawa T.: Calibration of GO and G for school dental health on the basis of CAD. 600,000yen.

2: Grant-in-aid for Scientific Research(C), No.19592240, Continued : Taguchi N. (representative), Ogawa T., Tanaka R., Kawamura M., Sasahara H.: Study and application of denture wearers' behavioral science.- Can we understand what they intend?- 1,000,000yen.

(5) Academic Awards, etc.

(6) Patents
Department of Oral Health and Development (Special Care Dentistry)

(1) Staffs and Students

Associate Professor: Mitsugi Okada (※) Head of Dentistry
Research Associate: Koichi Hayashida
Resident: Mie Aoki

(2) Main Research Activities

1: A study on caries risk of patients with disabled
2: A study on risk of periodontal disease of patients with disabled
3: A study on periodontal tissue regeneration using bone marrow mesenchymal stem cells
4: A study on dental problems of patients with disabled
5: A study on PBL task for dental problem of patients with mental retardation
6: A clinical study on endodontal-periodontal therapy

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting
1: PCR detection of *Streptococcus mutans* and *S. sobrinus* in schoolchildren: Okada M, Hayashida K, Yasuda R, Kurihara H: The 86th general session & exhibition of the IADR (Toronto), 2008


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

(5) Academic Awards, etc.

(6) Patents
Central Clinical Sections
(Special Dental Clinic Section)

(1) Staffs and Students

Chief Professor : Katsuyuki Kozai
Research Associate : Yuri Fujiwara (~Mar.)
                   Yukimi Yasuhara (Apr.~)

(2) Main Research Activities

1: Perceptual Evaluation of Cleft Palate Speech
2: Clinical Application of Electropalatography
3: Research for improvement in articulation problem
4: Research for relation between lingual pressure and the function of speech/swallowing

(3) Research Achievements

A) Original Papers (including Case Reports)
B) Review
C) Publications
D) Other Publications
E) Presentation at Scientific Meeting

(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

(5) Academic Awards, etc.

(6) Patents
Central Clinical Sections, Center of Oral Clinical Examination

(1) Staffs and Students

Director: Hidemi Kurihara
Associate Professor: Ikuko Ogawa (Clinic)
Research Associate: Tomoaki Shintani, Masae Kitagawa
Intern: Hisako Furusho
Technician: Keiko Banno

(2) Main Research Activities

1: Clinical study on endodontal-periodontal therapy
2: Clinicopathological study on head and neck lesions
3: Molecular pathological study on proliferation and development of oral squamous cell carcinoma
4: Study on cellular differentiation on salivary gland tumors
5: Study on molecular target therapy to oral cancer targeted with VEGFR and EGFR
6: Developmental study of treatment to dysgeusia
7: Study on test and treatment in metal allergy and dry mouth.
8: Study on function of cementoblast specific genes in human cementoblast.

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications


D) Other Publications


E) Presentation at Scientific Meeting


28: A case of myxolipoma of the edge of tongue: Okui T, Ono S, Mitani Y, Ogawa I, Miyauchi M, Takata
115


F) Special lectures in academic meetings


G) Others (Social contribution)

1: Examination of risk of dental caries: Ogawa I, Kitagawa M, Furusho H: Hiroshima University
extension lecture for senior high-school students (Hiroshima), 2008.

(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: Research project, Grant-in-Aid for Scientific Research (C) (New): Ogawa I: Histological and molecular biological study of standardization of the pathological diagnosis of salivary gland tumors: (No. 20592141) ¥1,300,000

2: Research project, Grant-in-Aid for Young Scientists (B) (New): Shintani T: Development of molecular target therapy of oral cancer targeting with FGF binding protein (FGFBP/HBp17): (No. 20791519) ¥2,100,000

3: Research project, Grant-in-Aid for Young Scientists (B) (New): Kitagawa M: Study on application of spondin to regeneration of periodontal tissues: (No. 20791339) ¥2,210,000

(5) Academic Awards, etc.

(6) Patents
Central Clinical Sections
(Dental Technicians Section)

(1) Staffs and Students

Director of Dental Technicians Section : Hiroki Nikawa (Prof.)
Chief Dental Technician : Hirotaka Okura
Supervisor Dental Technician : Masanobu Yamamoto, Eisaku Habu, Yoshihiro Otani, Meiji Yamamoto, Ryoji Kato
Research Fellow of Dental Technician : Satoko Kawamura, Haruka Koide

(2) Main Research Activities

1: Management of the patients’ information by the use of implanted devices in the denture.
2: Radioprotective prostheses for irradiation therapies
3: Clinical analysis of superstructure of implant.
4: Esthetic dentistry
5: Accuracy of castings
6: Information processing in the dental laboratory

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting

(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

(5) Academic Awards, etc.
(6) Patents
Central Clinical Sections
(Oral Hygiene Section)

(1) Staffs and Students

Director of Dental Hygiene Section: Nobuyuki Kamata
Chief Dental Hygienist: Hiroko Tamura
Supervisor Dental Hygienist: Yoriko Iwasaki, Miyuki Nakaoka
Dental Hygienist: Akiko Kawashima, Miho Yoneda, Tomoko Hatakeyama,
Kayo Kajitani, Tetsuko Hayashida, Kumi Miyakawa,
Tomoko Tokikazu, Kanako Matsui, Kanako Yano, Kana Dainobu,
Naomi Hara, Miho Okada, Rie Kanna, Ayumi Kouchi,
Megumi Takamoto, Itsuka Kouno
Dental Assistant: Yuri Ota, Yuka Tamamoto, Hisako Ozaki, Mayumi Yatabe

(2) Main Research Activities

1: A study about the dentistry health guidance that dental hygienist performs.
2: A study about improvement of local dentistry health.

(3) Research Achievements

A) Original Papers (including Case Reports)

B) Review

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting

1: Dental spectrophotometer is useful for whitening teeth at home. - a case report- : Kanako Yano,
Morioki Fujitani, Hiroko Tamura : The Journal of Hiroshima Society for Dental Hygiene
(Hiroshima).2008

2: Evaluation of Banaperio, a detection kit on the periodontal bacteria in pediatric dentistry : Miyuki
Nakaoka, Chieko Mitsuhta, Fumiko Hayashi, Jyunji Suzuki, Katsuyuki Kozai : 46th Japanese


6: Dental spectrophotometer is useful for whitening teeth at home - a case report: Kanako Yano, Morioki Fujitani, Satoki Shibata, Keniti Shirai, Hiroko Tamura: 19th Japan Academy of Esthetic Dentistry (Nigata). 2008

F) Special lectures in academic meetings

(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: Grants in Aid for Encouragement of Scientist: Tomoko Tokikazu, A dental caries risk study on distributions of streptococcus mutans in patients with disabled: Grant No. 20931007, ¥ 510,000

(5) Academic Awards, etc.

(6) Patents
Dental Clinical

(1) Staffs and Students

Assistant Professor : Hiroshi Yoshino
Research Associate : Masaru Ohara

(2) Main Research Activities

1: Multi drug-resistant *Pseudomonas aeruginosa*
2: Construction of HIV patients treatment network system

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications

D) Other Publications


E) Presentation at Scientific Meeting

(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: Trust research expense : Study of construction of dental care system to HIV patients in Chugoku
and Sikoku district  3,000,000 yen

(5) Academic Awards, etc.

(6) Patents
Dental Medical Information Section

(1) Staffs and Students

Director: Katsuyuki Kozai (Co.)
Professor: Hideaki Amano (Co.)
Assistant: Masahiko Ohtsuka (Co.), Takeshi Tanaka
Technician: Tokue Yanagida (Co.)

(2) Main Research Activities

1: Research on development and management of hospital information system.
2: Research on Medical Informatics.

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting

1: A simulation model on constructing the disaster-victim information system using hazard map information : T Tanaka, K Ishikawa, H Tsukuma, N Iwata, M Ikeuchi, Y Iwasaki, N Konishi : The 12th Spring Meeting of Japan Association for Medical Informatics (Symposium 2008 in Akita), 2008.


8: EHR as Strategic Tool to Improve Safety Healthcare - Structural Change for Clinical Process


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1: The research grant of the Okawa Foundation in 2007 (No. 07-23).

(5) Academic Awards, etc.

(6) Patents