Hiroshima University Graduate of Biomedical & Health Sciences (Dentistry) and Hiroshima University Hospital (Dental Departments)

Research Achievements

2017
Contents

Hiroshima University School of Dentistry, Hiroshima University Hospital, Graduate School of Biomedical & Health Sciences

Departments of Program of Dentistry

- Department of Calcified Tissue Biology
- Department of Oral Biology
- Department of Physiology and Oral Physiology
- Department of Molecular Biology and Biochemistry
- Department of Oral and Maxillofacial Pathobiology
- Department of Bacteriology
- Department of Cellular and Molecular Pharmacology
- Department of Biomaterials
- Department of Mucosal Immunology
- Department of Periodontal Medicine, and Division of Preventive and Restorative Dentistry (Department of Periodontics and Endodontics)
- Department of Molecular Oral Medicine & Maxillofacial Surgery, Division of Oral and Maxillofacial Surgery and Oral Medicine (Department of Oral and Maxillofacial Surgery)
- Department of Oral and Maxillofacial Surgery, and Division of Oral and Maxillofacial Surgery and Oral Medicine (Department of Oral and Maxillofacial Reconstructive Surgery)
- Department of Advanced Prosthodontics, and Division of Preventive and Restorative Dentistry (Department of Oral Implant)
- Department of Advanced Prosthodontics, and Division of Preventive and Restorative Dentistry (Department of Prosthetic Dentistry)
- Department of Orthodontics and Craniofacial Development Biology, and Division of Oral Health and Development (Department of Orthodontics)
- Department of Oral & Maxillofacial Radiology, Division of Oral and Maxillofacial Surgery and Oral Medicine (Department of Oral and Maxillofacial Radiology)
- Department of Biological Endodontics, and Division of Preventive and Restorative Dentistry (Department of Operative and Conservative Dentistry)
- Department of Pediatric Dentistry, and Division of Oral Health and Development (Department of Pediatric Dentistry)
- Department of Dental Anesthesiology, and Division of Oral & Maxillofacial
Surgery and Oral Medicine (Department of Dental Anesthesiology and Orofacial Pain Management)
- Department of Global Dental Medicine and Molecular Oncology

Departments of Program of Oral Health Sciences
- Department of Public Oral Health
- Department of Maxillofacial Functional Development
- Department of Oral Health Management
- Department of Anatomy and Functional Restorations
- Department of Medical System and Biomaterial Engineering
- Department of Oral Biology & Engineering

Central Research Laboratory

Division of General Dentistry, Department of General Dentistry
Division of Oral Health and Development, Department of Oral Health
Division of Oral Health and Development, Department of Special Care Dentistry

Central Clinical Divisions, Special Dental Clinic Section
Central Clinical Divisions, Center of Oral Clinical Examination
Central Clinical Divisions, Dental Technicians Section
Central Clinical Divisions, Dental Hygiene Section

Dental Clinic
Dental Medical Information Section
Department of Calcified Tissue Biology

(1) Staff and Students

Professor: Yuji Yoshiko
Assistant Professor: Tomoko Minamizaki, Hirotaka Yoshioka (until March)
Research Assistant: Yayoi Sato, Atsuko Tomiyama, Masaaki Toshishige (from August)
Graduate Student: Saki Okita (Orthodontic Dentistry, until March), Yuko Nakao (Orthodontic Dentistry, until March), Faisal Ahmed, Yasumasa Irie (Pediatric Dentistry), Sarmin Nushrat, Masashi Nakano (Pediatric Dentistry), Shota Ito (Orthodontic Dentistry), Chise Fujimoto

(2) Main Research Activities

1 : Bone and tooth formation and mineralization
2 : Calciotropic and phosphotropic factors and mineral metabolism
3 : Osteonetwork
4 : MicroRNAs
5 : Bone metastasis

(3) Research Achievements

A) Original Papers (including Case Reports)

1 : Comparative proteome analysis of wild-type and klotho-knockout mouse kidneys using a combination of MALDI-IMS and LC-MS/MS: Yoko Fujino, Tomoko Minamizaki, Ikue Hayashi, Asako Kawakami, Takaaki Miyaji, Kaoru Sakurai, Hirotaka Yoshioka, Katsuuki Kozai, Mitsugi Okada, Yuji Yoshiko: Proteomics Clin Appl. 11 (7-8), 2017.

B) Review


C) Publications
D) Other Publications

E) Presentation at Scientific Meeting


F) Special lectures in academic meetings


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

1 : Grants-in-Aid for Scientific Research (C) (Continuance): Tomoko Minamizaki, Trials to inhibit bone metastasis by focusing on miRNAs in bone. 16K11443. 1,950,000 yen
2 : Japan Agency for Medical Research and Development, The iD3 Booster (Continuance): Yuji Yoshiko, Development of a new class of anti-ectopic mineralization. DNW-14017. 24,516,000 yen
3 : Japan Agency for Medical Research and Development, Rare/Intractable Disease Research (New): Yuji Yoshiko, Development of a new class of anti-mineralization. 23,790,000 yen
4 : Grants-in-Aid for Scientific Research (C) (New): Yuji Yoshiko (Co-investigator), Functional analysis of soluble FGF receptor derived from bone and cartilage and its application to bone and cartilage regeneration. 17K11804. 200,000 yen
5 : Grants-in-Aid for Scientific Research (C) (New): Yuji Yoshiko (Co-investigator), Analysis of fate determination of osteoblasts at the single cell level with the search for a novel target of bone formation agents. 17K11613. 200,000 yen
6 : Raffinee International Corporation (New): Yuji Yoshiko, 1,800,000 yen

(5) Academic Awards, etc.

5 : Mai Yoshino: Japan Dental Association/Dentsply Sirona, Student Clinician Research
(6) Patents

Yuji Yoshiko, Yuichiro Takei, Tomoko Minamizaki, Hirotaka Yoshioka, Yasuo Ochi: Inhibitors of osteoclast formation and/or function, activators of osteoclast formation and/or function, and screening methods for inhibitors/activators of osteoclast formation and/or function (JP2017039668) Applicants: Ono Pharmaceutical Co. Ltd. and Hiroshima University.
Department of Physiology and Oral Physiology

(1) Staffs and Students

Professor : SUGITA, Makoto
Associate Professor : HIRONO, Chikara (~2017.3)
Assistant Professor : KITAGAWA, Michinori
Graduate Students : YAMAMOTO, Kuniyo

(2) Main Research Activities

1 : The molecular and cellular bases of taste perception and coding
2 : The neuronal mechanisms underlying the taste-evoked behavioral and emotional responses
3 : The molecular mechanisms of ion and fluid transport in salivary glands
4 : The molecular mechanisms in development, morphogenesis and functional maintenance of salivary glands and oral tissues
5 : Studies on the function and dysfunction of ion channels and transporters

(3) Research Achievements

A) Original Papers (including Case Reports)

B) Review

C) Publications

D) Other publication

E) Presentation at Scientific Meeting


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

1: The Salt Science Research Foundation: Sugita M., Information processing and mutual regulation in the neurons relaying attractive and aversive salt tastes. ¥1,200,000.

(5) Academic Awards, etc.

(6) Patents

Return to Contents
Department of Molecular Biology and Biochemistry

(1) Staff and Students

Professor: Chisa Shukunami
Assistant Professor: Katsumi Fujimoto
Assistant Professor: Hiroshi Yamashita (~ Aug.)
Assistant Professor (Special Appointment): Yuki Yoshimoto
Graduate Student: Seima Tanaka (~ Sep.)
Undergraduate Student: Kengo Mori

(2) Main Research Activities

1: Mechanisms regulating in the establishment of the junction between cartilage and tendon/ligament
2: The role of Pax1 during formation of vertebral column
3: Mechanisms of tendon/ligament formation
4: Mechanisms of periodontal ligaments formation
5: Pathogenic mechanisms involved in adolescent idiopathic scoliosis
6: Mechanisms regulating differentiation of dental pulp stem cells

(3) Research Achievements

A) Original Papers (including Case Reports)


4: TGF-beta1 Improves Biomechanical Strength by Extracellular Matrix Accumulation Without Increasing the Number of Tenogenic Lineage Cells in a Rat Rotator Cuff Repair Model: Arimura H,
B) Review


C) Publications

D) Other Publications

E) Presentation at Scientific Meeting

1: Trends in basic sciences on the musculoskeletal system: Hisafumi Komori, Chisa Shukunami, Yasuharu Kobayashi, Shiro Ikegawa: Bone Summit (Fukuoka), 2017


F) Special lectures in academic meetings

1: Regulation of intervertebral disc development by Pax1 and Sox9: Shukunami C: Gordon Research Conference (Barga), 2017.


3: Molecular mechanism regulating formation and maintenance of intervertebral discs: Chisa Shukunami: The 8th Orthopedic Research Club (Kisarazu), 2017.

4: Scleraxis is required for maturation of tissue domains for integration of musculoskeletal system: Yuki Yoshimoto, Aki Takimoto, Hitomi Watanabe, Gen Kondoh, Tetsushi Sakuma, Takashi Yamamoto,
(4) Status of Receiving Grants-in Aid for Scientific Research, etc.

1 : Grant-in-Aid for Challenging Exploratory Research: Chisa Shukunami, 16K15780. ¥1,100,000
2 : AMED : Chisa Shukunami, 17929951. ¥1,153,000
3 : Grant-in-Aid for Scientific Research (C): Aki Takimoto, Chisa Shukunami, 16K10899. ¥100,000
4 : Grant-in-Aid for Challenging Exploratory Research: Shigeru Miyaki, Chisa Shukunami, 16K15667. ¥200,000
5 : The Cooperative Research Program of the Institute for Frontier Medical and life Sciences, Kyoto University: Chisa Shukunami, ¥2,000,000
6 : Grant-in-Aid for Young Scientists (B): Yuki Yoshimoto, 17K17092. ¥2,300,000
7 : Grant-in-Aid for Scientific Research (C): Katsumi Fujimoto, 16K09624. ¥150,000
8 : Grant-in-Aid for Scientific Research (C): Katsumi Fujimoto, 17K115415B. ¥200,000

(5) Academic Awards, etc.

(6) Patents

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Department of Oral and Maxillofacial Pathobiology

(1) Staffs and Students

Professor: Takashi Takata
Associate Professor: Mutsumi Miyauchi
Assistant Professor: Hisako Furusho, Toshinori Ando (until August)
Research Assistant: Chea Chanbora
Graduate Student: Shinichi Sakamoto (D3), Shrestha Madhu (D3), Sakura Yamada (D3, Department of orthodontics)

(2) Main Research Activities

1. Molecular pathology on development and progression of oral cancer
2. Study on cellular differentiation and diagnostic pathology of odontogenic tumors and salivary gland tumors.
3. Translational study on new preventive and therapeutic method with lactoferrin for bone destructive diseases such as periodontitis and rheumatoid arthritis
4. Study on oral-systemic disease connection
5. Development of prognostic/diagnostic examination system of preterm birth targeting serum Galectin-3

(3) Research Achievements

A) Original Papers (including Case Reports)


13: Central mucoepidermoid carcinoma arising from glandular odontogenic cyst confirmed by analysis of MAML2 rearrangement.: A case report: Nagasaki A., Ogawa I., Sato Y., Takeuchi K., Kitagawa M.,
B) Reviews

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting
1) Special lectures in academic meetings
1: Selection and specificity of myoepithelial/basal cell markers in pathological diagnoses of salivary gland tumors. Companion meeting “Review of significance of immunohistochemistry in practical


2) Presentation at International Scientific Meeting


3) Presentation at Domestic Scientific Meeting


5: The transition of tissue inhibitor of metalloprotease-1 and -4 expressions induces aggressive behavior and poor patient survival in dedifferentiated liposarcoma via YAP/TAZ activation.: Shrestha M.,


7: The effects of Porphyromonas gingivalis (P.g.) infection into hepatocyte on development and progression of hepatocellular carcinoma (HCC).: Sakamoto S., Furusho H., Miyauchi M., Tahara H., Takata T.: Japanese Society of Periodontology Diamond Anniversary Meeting (Kyoto), 2017.

4) Case Reports at Scientific Meeting

1: Parotid gland lesion (Sclerosing polycystic adenosis ) : Ogawa I., Takata T.: 123rd Academic Meeting of Chugoku-Shikoku Branch of the Japanese Society of Pathology (Kurashiki), 2017.


5) Others


3: The vision and activity for the social industry-academia cooperation of Hiroshima University.: Takashi T.: The regional forum to promote full-scale collaboration research among industry, academia and government in Chugoku. (Hiroshima), 2017.


6: The vision and activity for the social industry-academia cooperation of Hiroshima University -The correspondence situation to "guideline" and problem-.: Takata T.: Charge Director Meeting of a National University Corporation in FY 2017 (Tokyo), 2017.

7: OPERA "Genome editing" industry-academia co-creation consortium.: Takata T.: 3rd WG of Japan Association of National Universities to promote full-scale collaboration research among industry, academia and government (Tokyo), 2017.


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

1: Grants-in-Aid for Scientific Research (Scientific Research(B)) (Continuance): Takata T.: Decision of the sequence on Lactoferrin important for anti-osteoclastogenesis and development of peptide medicine for bone destructive lesions.
(16H05503: 4,940,000 yen)

2: Grants-in-Aid for Scientific Research (Scientific Research(C)) (Continuance): Miyauchi M.: Clarification of pathological progression mechanisms nonalcoholic steatohepatitis caused by dental infection of periodontal pathogen.
(16K11444: 1,560,000 yen)

3: Grants-in-Aid for Scientific Research (Young Scientists (B)) (Continuance): Furusho H.: Explication
of NASH exacerbation through TLR2-pathway by redcomplex odontogenic infection. (16K20437: 1,430,000 yen)

4: Grants-in-Aid for Scientific Research (Young Scientists (B)) (New): Ando. T.: Explication of a YAP regulatory mechanism of TIMP-1 in tumor. (17K17084: 1,690,000 yen)

5: Donated fund from Sunstar Co. Ltd. (Continuance): Takata T. (Study on periodontitis)

6: Donated fund for Hiroshima Prefecture tumor registration business (Continuance): Takata T. (Study on oral diseases)

7: Donated fund from Mitsubishi-Mihara Hospital (Continuance): Takata T. (Study on diagnosis for oral disease)

8: Donated fund from Earth Co. (New): Takata T.

9: Donated fund from Arkray, Inc. (New): Miyauchi M.

(5) Academic Awards

1: Eri Ishida Hiroshima University President Award
2: Madhu Shrestha 50th Hiroshima University Dental Society Research Incentive Award
3: Toshinori Ando The Japanese Society of Oral Pathology Encouraging Award
4: Keimi Chou 2017 JADR/Joseph Lister Award

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Department of Cellular and Molecular Pharmacology

(1) Staff and Students

Professor: Takashi Kanematsu
Assistant Professor: Satoshi Asano, Yosuke Yamawaki
Professor (Special Appointment): Katsuya Morita, Toshiyuki Sasaguri, Minoru Wakamori, Takayuki Tsukuba, Akira Toyofuku, Tamotsu Kiyoshima
Graduate Student: Yuka Maetani, Hiroki So, Syuzo Sakata
Collaborator: Kae Harada (Kagoshima University), Kana Oue (Hiroshima University Hospital Medical Staff), Tomomi Sano (Kyushu University)
Research Student: Satomi Shirawachi (6th), Yuri Taniguchi (6th), Satoru Kusaka (5th), Munechika Takaishi (5th), Yasuka Ikura (4th)

(2) Main Research Activities

1: Studies on the molecular mechanisms of GABA_{\alpha} receptor signaling in the central nervous system
2: Studies on the regulatory mechanisms of food intake and energy metabolism
3: Studies on the roles of a new autophagy-related molecule in autophagy pathway
4: Studies on the mechanisms of cell migration regulated by a new molecule
5: Studies on the molecular mechanisms of thermogenesis in brown adipocytes
6: Studies on the relationship between immune systems and depression-like behavior

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review


C) Publications


E) Presentation at Scientific Meeting


2: Upregulation of UCP1 expression in the adipose tissues of Prip-KO mice exposed to a cold environment : Oue Kana, Masahiro Irifune, Takashi Kanematsu : The 131st Regional Meeting (Kinki) of The Japanese Pharmacological Society (Nagoya), 2017.


4: Over expression of PRIP in MCF-7 cells, a breast cancer cell line, enhances cisplatin induced apoptosis : Yuka Maetani, Satoshi Asano, Masahiro Irifune, Takashi Kanematsu : the 50th Annual Meeting of the Hiroshima University Dental Society (Hiroshima), 2017.

5: Regulation of cytokinesis by phospholipase C-related catalytically inactive protein, as a sequestrant of


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


(5) Academic Awards, etc.

1: Satomi Shirawachi: Student Best Poster Award (co-authors: Yosuke Yamawaki, Takashi Kanematsu), The 59th Annual Meetings of Japanese Association for Oral Biology
Department of Biomaterials

(1) Staff and Students

Professor: Koichi Kato
Assistant Professor: Yuji Nomura, Isao Hirata
Graduate Student: Shakya Ajay, Azusa Onishi, Tomoko Ogasawara, Fumiko Nishio, Yuuka Yamauchi, Satoshi Miyauchi, Ayana Nakano

(2) Main Research Activities

1: Biomaterials and biodevices for regenerative medicine
2: Study on the interactions between biological systems and biomaterial surfaces
3: Development of novel disinfectants for dental materials

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting

1: Interplay between cell death and differentiation in 3D mesenchymal stem cell pellets: Try Ky, Malina Prak, and Koichi Kato: The 5th Annual Meeting of the Japan Biomaterials Association ChuShikoku
Symposium (Tokushima, Japan), 18 January 2017.


7: Surface immobilized basic fibroblast growth factor--a novel approach for the efficient expansion of mesenchymal stem cells using bioengineered surfaces--: Ajay Shakya, Eiji Imado, Kim Phuong Nguyen, Isao Hirata, Koichi Kato: 7th National Scientific Meeting in Dentistry and 4th Joint Scientific Meeting in Dentistry (Surabaya, Indonesia), 5–7 October 2017.

8: Effect of culture method on differentiation of iPS cells to odontogenic epithelial cells: Satoshi Miyauchi, Aimi N. Abdullah, Koichi Kato: Joint Meeting of 56th Hiroshima Prefectural Dental Association and 101th Hiroshima University Dental Society (Hiroshima, Japan), 29 October 2017.


F) Special lectures in academic meetings


2: Differentiation of mesenchymal stem cells in response to anisotropic microenvironments established in three-dimensional pellets: Try Ky, Malina Prak, Isao Hirata, Koichi Kato: 5th China-Japan
Symposium on Nanomedicine (Suzhou, China), 16-18 September 2017.


4: Protein engineering as a new methodology for synthesizing functional biomaterials: Koichi Kato: 7th National Scientific Meeting in Dentistry and 4th Joint Scientific Meeting in Dentistry (Surabaya, Indonesia), 5-7 October 2017.


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

1: Grant-in-Aid for Scientific Research (B), Ministry of Education, Culture, Sports, Science and Technology, Representative Kato K.: Kato K.: Design of culture substrate for large-scale preparation of epithelial cell derived from iPS cell.: No. 16H03182. 2,500,000JPY.

2: Grant-in-Aid for Scientific Research (C), Ministry of Education, Culture, Sports, Science and Technology, Representative Tanimoto K.: Kato K.: Dynamic control of stem cells from human exfoliated deciduous teeth (SHED) by construction of microenvironment and its application to palate cleft regeneration treatment.: No. 16K11788. 200,000JPY.

3: Grant-in-Aid for Scientific Research (B), Ministry of Education, Culture, Sports, Science and Technology, Representative Kurihara H.: Kato K.: Development of periodontal tissue regeneration therapy by 3D tissue transplantation constructed from spherical bone marrow mesenchymal stem cell clusters.: No. 15H05053. 50,000JPY.

4: Grant-in-Aid for challenging Exploratory Research, Ministry of Education, Culture, Sports, Science and Technology, Representative Hirata I.: Hirata I.: Development of Resin and Powder mixed biodegradable filament for 3D printing system.: No. 16K15803. 500,000JPY.

5: Grant-in-Aid for Scientific Research (C), Ministry of Education, Culture, Sports, Science and Technology, Representative Shimoe S.: Hirata I.: Development of new micro-maintenance for expansion of application area of zirconia.: No. 16K11593. 50,000JPY.

6: Grant-in-Aid for Scientific Research (B), Ministry of Education, Culture, Sports, Science and
Technology, Representative Kato K.: Hirata I.: Design of culture substrate for large-scale preparation of epithelial cell derived from iPS cell.: No. 16H03182. 100,000JPY.

7: Grant-in-Aid for Scientific Research (C), Ministry of Education, Culture, Sports, Science and Technology, Representative Kanawa M.: Hirata I.: Development of differentiation predictive marker to evaluate stemness of bone marrow derived mesenchymal stem cells.: No.17K11541. 200,000JPY.

(5) Academic Awards, etc.


(6) Patents

• Department of Periodontal Medicine
• Division of Preventive and Restorative Dentistry
(Department of Periodontics)

(1) Staffs and Students
Professor: Hidemi Kurihara
Associate Professor: Tsuyoshi Fujita
Associate Professor, Lecturer: Noriyoshi Mizuno
Assistant Professor: Yuushi Uchida (-February), Katsuhiro Takeda, Tomoyuki Iwata,
Kazuhsa Ouhara, Mikihito Kajiya, Shinji Matsuda
Assistant Professor (Special Appointment): Eri Kaneda (-February)
Resident: Mizuho Kittaka (studying abroad), Kei Kashiwai (-March), Tetsuya Yoshimoto (studying abroad), Yusuke Aida (-March), Keita Takahashi, Kei Takahashi (-March), Ai Okanobu, Manabu Takewaki,
Graduate Student: Yoshie Niitani (under leave of absence), Masahiko Suzukawa, Syuichi Munenaga, Keiichi Akutagawa, Nao Komatsu, Yoko Sato, Minami Yoshioka (under leave of absence), Shinya Sasaki, Yuta Hamamoto, Tasuku Takemura, Daisuke Furutama, Saki Hatano, Sota Motoike, Susumu Horikoshi, Misako Tari
Clinical Trainee: Takayoshi Nagahara, Nobuaki Yamaguchi (-July), Akihiro Konishi, Kaoruko Iwabuchi, Yoshiaki Shimasaki, Yuushi Uchida (April -), Kei Takeshita (April -)

(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 the relationship between periodontal disease and rheumatoid arthritis
5: Study on the relationship between periodontal disease and diabetes mellitus
6: Study on physiological function and differentiation of the cells derived from periodontal ligament
7: Study on prevention for periodontal disease
8: Study on gingival hyperplasia

(3) Research Achievements
Original Papers (including Case Reports)
1. DC-Stamp is an osteoclast fusogenic engaged in periodontal bone resorption.
2. A novel gingival overgrowth mouse model induced by the combination of CsA and ligature-induced inflammation
   Ai Okanobu, Shinji Matsuda, Mikihito Kajiya, Tsuyoshi Fujita, Mizuho Kittaka, Hidemi Kurihara
   Journal of Immunological Methods, 2017 January, 445, 31-36

3. Brain-Derived Neurotrophic Factor Inhibits Peptidoglycan-Induced Inflammatory Cytokine Expression in Human Dental Pulp Cells.
   Takeda K, Tokunaga N, Aida Y, Kajiya M, Ouhara K, Sasaki S, Mizuno N, Fujita T, Kurihara H.
   Inflammation, 2017 Feb, 40(1), 240-247

4. Xenotransplantation of interferon-gammapretreated clumps of a human mesenchymal stem cell/extracellular matrix complex induces mouse calvarial bone regeneration
   Kei Takeshita, Souta Motoike (equal contribution), Mikihito Kajiya, Nao Komatsu, Manabu Takewaki, Kazuhisa Ouhara, Tomoyuki Iwata, Katsuhiro Takeda, Noriyoshi Mizuno, Tsuyoshi Fujita, Hidemi Kurihara
   Stem Cell Research & Therapy, 2017 April, 8(1), 101

5. MSC/ECM Cellular Complexes Induce Periodontal Tissue Regeneration.
   Journal of Dental Research, 2017 August, 96(9), 984-991

6. Effect of local bone marrow stromal cell administration on ligature-induced periodontitis in mice
   Iguchi S, Suzuki D, Kawano E, Mashimo T, Kajiya M, Toriumi T, Kawai T, Kurihara H, Isokawa K, Sato S, Honda M

7. Useful Immunochromatographic Assay of Calprotectin in Gingival Crevicular Fluid for Diagnosis of Diseased Sites in Patients with Periodontal Diseases.
   J Periodontol, 2017 Sep, 6, 1-19

B) Review

C) Publications

D) Other Publications
E) Presentation at Scientific Meeting

1. Investigation of mechanotransduction pathway in the regulation of stem cell fate in 3D culture clumps of an MSCs/ECM complex
   Mikihito Kajiya, Nao Komatsu, Souta Motoike, Manabu Takewaki, Kei Takeshita, Kazuhisa Ouhara, Katsuhiro Takeda, Tomoyuki Iwata, Tsuyoshi Fujita, Hidemi Kurihara
   The 16th Congress of the Japanese Society for Regenerative Medicine (2017 March, Sendai)

2. Histological examination of furcation area periodontal tissue regeneration using Clumps of MSCs/ECM complex (C-MSCs)
   Manabu Takewaki, Mikihito Kajiya, Katsuhiro Takeda, Shinya Sasaki, Souta Motoike, Nao Komatsu, Shinji Matsuda, Kazuhisa Ouhara, Noriyoshi Mizuno, Tsuyoshi Fujita, and Hidemi Kurihara
   The 16th Congress of the Japanese Society for Regenerative Medicine (2017 March, Sendai)

3. The effect of cryopreservation on bone regenerative capacity of Clumps of MSCs/ECM complex
   Souta Motoike, Mikihito Kajiya, Kei Takeshita, Manabu Takewaki, Nao Komatsu, Tomoyuki Iwata, Katsuhiro Takeda, Kazuhisa Ouhara, Noriyoshi Mizuno, Tsuyoshi Fujita, Hidemi Kurihara
   The 16th Congress of the Japanese Society for Regenerative Medicine (2017 March, Sendai)

4. YAP/TAZ Signaling in 3D Culture Clumps of a MSC/ECM Complex
   Nao Komatsu, Mikihito Kajiya, Souta Motoike, Manabu Takewaki, Kei Takeshita, Tomoyuki Iwata, Kazuhisa Ouhara, Katsuhiro Takeda, Tsuyoshi Fujita, Hidemi Kurihara
   95th General Session & Exhibition of the International Association for Dental Research (2017 March, San Francisco, USA)

5. The C5a involvement in rheumatoid arthritis with P.gingivalis-infection in SKG-mice
   Syuichi Munenaga, Kazuhisa Ouhara, Masahiro Yamakawa, Mikihito Kajiya, Katsuhiro Takeda, Yushi Uchida, Noriyoshi Mizuno, Tsuyoshi Fujita, Hidemi Kurihara
   95th General Session & Exhibition of the International Association for Dental Research (2017 March, San Francisco, USA)

6. The involvement of C5a in the progression of P.gingivalis-infected rheumatoid arthritis in SKG mice.
   Syuichi Munenaga, Kazuhisa Ouhara, Masahiro Yamakawa, Satoshi Yamasaki, Eiji Sugiyama, Hidemi Kurihara
   The 61st Annual General Assembly and Scientific Meeting of the Japan College of Rheumatology (2017 April, Fukuoka)
7. The effect of cryopreservation on bone regenerative capacity of Clumps of MSCs/ECM complex
   Motoike Souta, Mikihito Kajiya, Kei Takeshita, Manabu Takewaki, Nao Komatsu, Tomoyuki Iwata, Katsuhiro Takeda, Kazuhisa Ouhara, Noriyoshi Mizuno, Tsuyoshi Fujita, Hidemi Kurihara
   The 60th Spring Meeting of the Japanese Society of Periodontology (2017 May, Fukuoka)

8. Mechanotransduction in 3D culture clumps of a mesenchymal stem cell/extracellular matrix complex regulates the cell fate
   Nao Komatsu, Mikihito Kajiya, Souta Motoike, Manabu Takewaki, Kei Takeshita, Kazuhisa Ouhara, Katsuhiro Takeda, Tomoyuki Iwata, Tsuyoshi Fujita, Hidemi Kurihara
   The 60th Spring Meeting of the Japanese Society of Periodontology (2017 May, Fukuoka)

9. The involvement of C5a in the progression of P.gingivalis-infected rheumatoid arthritis in SKG mice.
   Syuichi Munenaga, Kazuhisa Ouhara, Mikihito Kajiya, Katsuhiro Takeda, Yushi Uchida, Noriyoshi Mizuno, Tsuyoshi Fujita, Hidemi Kurihara
   The 60th Spring Meeting of the Japanese Society of Periodontology (2017 May, Fukuoka)

10. Analysis of gut microbiota in RA induced SKG mouse with Porphyromonas gingivalis infection
    Yuta Hamamoto, Kazuhisa Ouhara, Syuichi Munenaga, Mikihito Kajiya, Noriyoshi Mizuno, Tsuyoshi Fujita, Hidemi Kurihara
    The 60th Spring Meeting of the Japanese Society of Periodontology (2017 May, Fukuoka)

11. Morphological analysis of junctional epithelium on ligature-induced experimental periodontitis in mice
    Tasuku Takemura, Tsuyoshi Fujita, Shinji Matsuda, Mikihito Kajiya, Yushi Uchida, Keiichi Akutagawa, Kazuhisa Ouhara, Katsuhiro Takeda, Noriyoshi Mizuno, Hidemi Kurihara
    The 60th Spring Meeting of the Japanese Society of Periodontology (2017 May, Fukuoka)

12. Effects of glycyrrhizin on ligature-induced periodontitis with Porphyromonas gulae infection in diabetes model mouse
    Keiichi Akutagawa, Tsuyoshi Fujita, Tasuku Takemura, Kazuhisa Ouhara, Mikihito Kajiya, Shinji Matsuda, Noriyoshi Mizuno, Hidemi Kurihara
    The 50th Scientific Meeting of Hiroshima University Dental Society (2017 June, Hiroshima)

13. Effects of glycyrrhizin on ligature-induced periodontitis with Porphyromonas gulae infection in diabetes model mice
    Keiichi Akutagawa, Tsuyoshi Fujita, Tasuku Takemura, Kazuhisa Ouhara, Mikihito Kajiya, Shinji Matsuda, Noriyoshi Mizuno, Hidemi Kurihara
    The 38th Annual Meeting of the Japanese Society of Inflammation and Regeneration
14. Investigation of the regulatory mechanism for cell function on mesenchymal stem cells in periodontal regeneration by micro RNA
Tomoyuki Iwata
The 36th annual meeting of the japanese society for bone and mineral research
(2017 July, Fukuoka)

15. Administration of a novel SYK inhibitor Entospletinib ameliorates fully established inflammation and bone destruction in adult cherubism mice
Tetsuya Yoshimoto, Toshio Kondo, Mizuho Kittaka, Ysuyoshi Ueki
ASBMR 2017 Annual meeting (2017 September, Denver, USA)

16. Mechanotransduction in 3D culture clumps of a mesenchymal stem cell/extracellular matrix complex regulates the cell fate
Nao Komatsu, Mikihito Kajiya, Tsuyoshi Fujita, Hidemi Kurihara
The 59th Annual Meeting of Japanese Association for Oral Biology (2017 September, Matsumoto)

17. Clumps of a mesenchymal stem cell/extracellular matrix complex induces periodontal tissue regeneration
Manabu Takewaki, Mikihito Kajiya, Katsuhiko Takeda, Shinya Sasaki, Souta Motoike, Nao Komatsu, Shinji Matsuda, Kazuhisa Ouhara, Noriyoshi Mizuno, Tsuyoshi Fujita, and Hidemi Kurihara
The 12th Asian Pacific Society of Periodontology Meeting (2017 September, Seoul, Korea)

18. Effects of brain-derived neurotrophic factor (BDNF) as an adjunct to non-surgical periodontal treatment on ligature-induced periodontitis in dogs
Shinya Sasaki, Katsuhiko Takeda, Manabu Takewaki, Kazuhisa Ouhara, Mikihito Kajiya, Shinji Matsuda, Noriyoshi Mizuno, Tsuyoshi Fujita, Hidemi Kurihara
The 12th Asian Pacific Society of Periodontology Meeting (2017 September, Seoul, Korea)

19. Elucidation of the role of NR4A1 in CsA induced gingival overgrowth
Ai Okanobu, Shinji Matsuda, Mikihito Kajiya, Tsuyoshi Fujita, Hidemi Kurihara
The 12th Asian Pacific Society of Periodontology Meeting (2017 September, Seoul, Korea)

20. Effects of brain-derived neurotrophic factor (BDNF) as an adjunct to non-surgical periodontal treatment on ligature-induced periodontitis in dogs
Shinya Sasaki, Katsuhiko Takeda, Manabu Takewaki, Kazuhisa Ouhara, Mikihito Kajiya, Shinji Matsuda, Noriyoshi Mizuno, Tsuyoshi Fujita, Hidemi Kurihara
The 101st Scientific Meeting of Hiroshima University Dental Society (2017 October, Hiroshima)

21. The effect of oral inoculation of different type FimA Porphyromonas gingivalis to SKG
mouse in the progression of rheumatoid arthritis
Yuta Hamamoto, Kazuhisa Ouhara, Jyunzo Hisatsune, Syuichi Munenaga, Mikihito Kajiya, Noriyoshi Mizuno, Tsuyoshi Fujita, Motoyuki Sugai, Hidemi Kurihara
The 101st Scientific Meeting of Hiroshima University Dental Society
(2017 October, Hiroshima)

22. Standardized evaluation of bFGF-induced periodontal tissue regeneration
Katsuhiro Takeda, Hidemi Kurihara
Workshop by Chugoku-Shikoku regional 3 universities of the Japanese society of Periodontology/ Chugoku-Shikoku regional branch of the Japanese academy of clinical periodontology (2017 November, Hiroshima)

23. Dental hygienist's activities and the effects in dental clinical support for HIV-infected patients
The 31th Annual Meeting of the Japanese Society for AIDS Research (2017 November, Tokyo)

24. Involvement of C5a in the progression of experimental arthritis in SKG mice induced by Porphyromonas gingivalis infection
Syuichi Munenaga, Kazuhisa Ouhara, Hidemi Kurihara
The 46th Annual Meeting of the Japanese Society for Immunology (2017 December, Sendai)

25. The oriental medicine, magnoliaceae (Kouboku), inhibits the production of methyl mercaptan via mgl mRNA inhibition.
Yoko Sato, Kazuhisa Ouhara, Tomoaki Shintani, Masae Kitagawa, Ikuko Ogawa, Mikihito Kajiya, Noriyoshi Mizuno, Tsuyoshi Fujita, Hidemi Kurihara
The 60th Japanese Society of Periodontology Diamond Anniversary Meeting in Kyoto (2017 December, Kyoto)

26. The effect of oral inoculation of different type FimA Porphyromonas gingivalis to SKG mouse in the progression of rheumatoid arthritis
Yuta Hamamoto, Kazuhisa Ouhara, Syuichi Munenaga, Mikihito Kajiya, Noriyoshi Mizuno, Tsuyoshi Fujita, Hidemi Kurihara
The 60th Japanese Society of Periodontology Diamond Anniversary Meeting in Kyoto (2017 December, Kyoto)

27. Involvement of C5a in the progression of experimental arthritis in SKG mice induced by Porphyromonas gingivalis infection
Syuichi Munenaga, Kazuhisa Ouhara, Mikihito Kajiya, Katsuhiro Takeda, Noriyoshi Mizuno, Tsuyoshi Fujita, Hidemi Kurihara
The 60th Japanese Society of Periodontology Diamond Anniversary Meeting in Kyoto (2017 December, Kyoto)
28. Effects of glycyrrhizin on ligature-induced periodontitis with Porphyromonas gulae infection in diabetes model mice
• Department of Molecular Oral Medicine & Maxillofacial Surgery
• Division of Oral & Maxillofacial Surgery and Oral Medicine (Department of Oral & Maxillofacial Surgery)

(1) Staff and Students

Professor: Tetsuji Okamoto  Department Chair: Tetsuji Okamoto (Concurrent appointment)
Associate Professor: Shigeaki Toratani
Clinical Associate Professor: Yasutaka Hayashido
Assistant Professor: Ryouji Tani, Yukio Yoshioka, Kouichi Koizumi, Taku Kanda, Kensaku Sumi,
                 Tomoaki Hamana, Sachiko Yamasaki, Taishi Sakaue
Clinical fellow: Yuki Taguchi, Atuko Hmada, Mirei Suematu (~Sep), Eri Akagi (~May)
                 Shigeru Sakurai, Fuyuyoshi Takatsu (~Apr), Hirotaka Takatao
                 Humitaka Obayashi (Apr~), Kouji Tsushima (Oct~), Taeko Fukutani (Oct~),
Registered part-time doctor: Emiko Usui, Isao Takahashi, Koh Nabeshima, Yasutaka Ishida,
                 Hidemasa Miyata, Yoshinari Myoken (Apr~), Yoshinori Fujita (Apr~)
                 Kohsei Okamoto (Apr~), Yoku Ito (Apr~), Takahiko Hujii (~May),
                 Mirei Suematu (Oct~)
Graduate Student: Humitaka Obayashi (~May), Kouji Tsushima (~Sep), Taeko Fukutani (~Sep),
                 Youji Nakase, Mirai Higaki, Suguru Hirota, Kensaku Matsui, Nguyen Quang Tam,
                 Kaori Uchisako, Seiya Hayashi, Tadayoshi Nobumoto, Takefumi Mishima
                 Shigeki Sato (~Apr)
                 Iwao Katayama, Hidemasa Miyata, Yuuichi Arita, Tomohiro Sado,
Visiting Researcher: ROSLI, Siti Nur Zawani

(2) Main Research Activities

1. Gene/molecular diagnosis and therapy for oral cancer and salivary gland tumors. (Cancer stem cells,
growth factors, growth factor receptors, invasion and metastasis, tumor angiogenesis, and
molecular/gene target therapy).
2. The molecular/genetic diagnosis and therapy for oral and cranio-maxillofacial deformities.
3. Establishment and characterization of human induced pluripotent stem (iPS) cells derived from
human pulp cells in serum- and feeder-free cell culture.
4. Generation of human induced pluripotent stem (iPS) cells derived from patients with genetic disorders in the oral and cranio-maxillofacial region in serum- and feeder-free culture to elucidate the molecular mechanism involved in the disease.

5. Purification of biologically active factors from marine organism.

6. Photodynamic therapy for oral cancer.

7. Immune cell therapy for oral cancer by using NK/lymphokine-activated killer (LAK) cells.

8. Jaw and tooth regeneration *in vitro*.

9. Molecular-epidemiological study of oral and maxillofacial disease among residents of Semipalatinsk Nuclear Test Site (SNTS) area in Kazakhstan.

10. Measuring brain hemodynamic changes on mounting dental appliance using Near-Infrared Spectroscopy

(3) Research Achievements

A) Original Papers (including Case Reports)


6. Atsuko Hamada, Eri Akagi, Hirotaka Nakatao, Fumitaka Obayashi, Taeko Yasui, Sachiko Yamasaki, Shigeaki Toratani, Tetsuji Okamoto: Generation of Disease-specific human iPSCs in integration,-


B) Review article

not applicable

C) Publications

not applicable

D) Other Publications

not applicable
E) Presentation at Scientific Meeting

1. **International Conference (invited speaker)**
   Tetsuji Okamoto: Overview and perspective in 30 years research of my laboratory after the Cell Science Center: The 15th International Conference on cellular endocrinology, 2017.11.18. (Hiroshima)


**International Meeting**


4. Tam Quang NGUYEN, Atsuko HAMADA, Hirotaka NAKATAO, Shigeaki TORATANI, Tetsuji OKAMOTO: Ionizing radiation induces cancer stem cell properties for head and neck squamous cell carcinoma cell lines in serum-free defined culture: The 15th International Conference on cellular endocrinology, 2017.11.18. (Hiroshima)


6. Taeko FUKUTANI, Atsuko HAMADA, Hirotaka NAKATAO, Fumitaka OBAYASHI, Sachiko YAMASAKI, Taku KANDA, Kouichi KOIZUMI, Shigeaki TORATANI, Tetsuji OKAMOTO: Genetic diagnosis of Neurofibromatosis type I (von Recklinghausen's disease) and establishment of NF1-specific induced pluripotent stem cells (iPSCs) in virus integration-, feeder-, and serum-free defined culture for disease model study: The 15th International Conference on cellular endocrinology, 2017.11.18. (Hiroshima)
7. Mirei Matsuoka, Yukio Yoshioka, Koichi Koizumi, Ryoji Tani, Yasutaka Hayashido, Shigeaki Toratani, Tetsuji Okamoto: A clinical study of patients over 85 years of age with oral cancer: The 15th International Conference on cellular endocrinology, 2017.11.18. (Hiroshima)

8. Fumitaka Obayashi, Atsuko Hamada, Hirotaka Nakatao, Taeko Fukutani, Eri Akagi, Sachiko Yamasaki, Taku Kanda, Shigeaki Toratani, Tetsuji Okamoto: Genetic diagnosis of Cowden Syndrome (CS) and establishment of CS-specific induced pluripotent stem cells (iPSC) in virus integration-, feeder-, and serum-free defined culture for disease model study: The 15th International Conference on cellular endocrinology, 2017.11.18. (Hiroshima)


11. Atsuko HAMADA, Hirotaka NAKATAO, Humitaka OHBAYASHI, Taeko HUKUTANI, Sachiko YAMASAKI, Kouichi KOIZUMI, Shigeaki TORATNI, Tetsuji OKAMOTO: Generation of disease specific-iPSCs in virus integration-, feeder-, and serum-free defined culture, and their use for disease model study: The 15th International Conference on cellular endocrinology, 2017.11.18. (Hiroshima)

Conference (invited speaker)


Domestic Meeting presentations


3. F.Obayashi, A.Hamada, H.Nakatao, E.Akagi, S.Hayashi, S.Yamasaki, T.Kanada, S.Toratani,


10. Tomomi Date, Yuuko Nakao, Hiroshi Ueda, Taku Kanda, Koiche Koizumi,Koutarou Tanimoto : A case of severe skeletal open bite with suspected acromegaly treated by orthognathic surgery : The 27th Annual meeting of the Japanese society for jaw deformities.2017.5.1 (Tokyo)

11. Y Fujita, J Kobayashi, E Sakaue, H Kohada, Y Yamane, M Ohobayashi, M Fujihara, Y Myoken, T Okamoto: A Case of Mucoepidermoid Carcinoma Derived from Palatal Gland and Forming Cystic Lesion in the Maxillary Sinus. : The 46nd Regional Meeting of the Japanese Society of Oral and Maxillofacial Surgeons, 2017. 5.27. (Shinyamaguchi)


27. Taeko Fukutani, Atsuko Hamada, Hirotaka Nakatao, Fumitaka Obayashi, Sachiko Yamasaki, Taku Kanda, Koichi Koizumi, Shigeaki Toratani, Tetsuji Okamoto: Research of Diagnosis and generation of specific iPSCs of Neurofibromatosis type I in serum-, and feeder-free condition: The 54th meeting of Japan Tissue Culture for Dental Research. 2017.11.3-4. (Morioka)


32. Y Myoken, E Sakaue, Y Fujita, T Okamoto: Unilateral Cheek Swelling in an Infant: Case Report of an Unusual Presentation of Internal Bleeding due to Vitamin K Deficiency. The 65nd Regional Meeting of Japanese Stomatological Society 2017.11.11. (Kouchi)

33. N.Ito, K.Okamoto, I.Ogawa, S.Toratani, T.Okamoto : A case of oral mucositis during the Nivolumab dosage : The 65th Japanese Stomatological Society Chugoku, Shikoku district sectional meeting 2017.11.11. (Kochi)

34. Yuichi Arita, Akihiko Sakamoto, Ryouji Tani, Yukio Yoshioka, Koichi Koizumi, Tomoaki Shintani, Yasutaka Hayashido, Shigeaki Toratani, Tetsuji Okamoto : Determination of effects of medication / Cerebrospinal fluid tap test for patients with dementia with decreased ADL, parkinsonism and suspected of normal pressure hydrocephalus by swallowing function test. : The 65th Japanese Stomatological Society Chugoku, Shikoku district sectional meeting 2017.11.11. (Kochi)


36. Yuichi Arita, Akihiko Sakamoto, Yukihiko Kawamoto, Shinji Akagi, Ryo Ogami, Obuhiko Ichinose, Tomoyuki Mantani, Tetsuji Okamoto : Investigation of cases of effects of medication / Cerebrospinal fluid tap test for patients with decreased ADL with dementia, parkinsonism and possibility of normal pressure hydrocephalus by videofluoroscopic examination of swallowing.:The 15th Workshop of the Hiroshima NST.2017.11.18. (Hiroshima)


F) Other lectures


(4) Status of Receiving Grants-in Aid for Scientific Research, etc.
1. Grants-in-aid for scientific research (B): Tetsuji Okamoto: Grant #15H05043
2. Grant-in-Aid for challenging Exploratory Research: Tetsuji Okamoto: #16K15823
4. Grants-in-aid for scientific research (C): Yukio Yoshioka: #17K11838
5. Grants-in-aid for scientific research (C): Tomoaki Shintani: #16K11723
7. Grants-in-aid for scientific research (C): Tomoaki Hamana: #17K11875
8. Grant-in-Aid for Young Scientists(B): Sachiko Yamasaki: #16K20580 1
9. Grant-in-Aid for Young Scientists(B): Taishi Sakaue: #17K17251
10. Grant-in-Aid for Young Scientists(B): Yuki Taguchi: #16K20539
11. Grant-in-Aid for Young Scientists(B): Atsuko Hamada: #17K17252
12. Program to supporting research activities of female researchers: Sachiko Yamasaki

(5) Academic Awards, etc.

2. Mirai Higaki¹, Tomoaki Shintani², Atsuko Hamada¹, S.N.Z. Rosli³, Emiko Usui³, Tetsuji Okamoto: Effect of VD derivative ED-71 on expression of HBp17 / FGFBP-1 and regulatory chemical messengers in oral squamous cell carcinoma cells: The 54th meeting of Japan Tissue Culture for Dental Research. 2017.11.3-4. (Morioka). Best Presentation Award of the54th meeting of Japan Tissue Culture for Dental Research.

(6) Patents

Patent Application Number: 2016-210972
Title of invention: Improvement agents for cancer survival rate, Inventors: Tetsuji Okamoto, Ryouji Tani, Kohihiro Tokumaru, Applicants: Hiroshima Univ. and Nihon Kefir Co., Ltd, PCT/JP2017/038961
• Department of Advanced Prosthodontics
• Division of Preventive and Restorative Dentistry
  (Department of Oral Implant)

(1) Staff and Students

Professor: Kazuhiro Tsuga
Associate Professor: Yasuhiko Abe, Mineka Yoshikawa, Takayasu Kubo
Associate Professor/Lecturer: Koh-ichi Kuremoto, Katsunori Koretaka
Assistant Professor: Hiroshi Oue, Yohei Okazaki, Shinsuke Okada
Research Associate: Maho Takeuchi, Mariko Maruyama, Takahiro Mori, Aya Hiraoka, Kan Kato, Yosuke Takeda
Graduate Student: Azusa Kuroki, Miyuki Yokoi, Reiko Kobatake, Miwa Sasaki, Fumiko Nishio, Erika Asahara
Clinical Trainee: Toru Akutu, Daijirou Kubo
Administrative staff: Rinko Kurumi

(2) Main Research Activities

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

(3) Research Achievements

A) Original Papers (including Case Reports)
2: Application of interconnected porous hydroxyapatite ceramic block for onlay block bone grafting in


B) Review

C) Publications
D) Other Publications

E) Presentation at Scientific Meeting


11: Effect of intermittent administration of parathyroid hormone on osseointegration in steroid


22: Novel porous titanium biomaterial with three dimensiona...
2017.


F) Special lectures in academic meetings


3: Dentist's point of view: Mori T: The 16th Hiroshima Rehabilitation Association (ingestion/swallow department) (Hiroshima), 2017.


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

1: MEXT Grant-in-Aid for Scientific Research (C): Kubo T: Establishment of implant treatment with acceleration of bone metabolism (Grant No. 16K1159560). ¥1,430,000

2: MEXT Grant-in-Aid for Scientific Research (C): Yoshikawa M: Can the early detection and early improvement of oral frailty stop the frailty? (Grant No. 16K11887). ¥1,300,000

3: MEXT Grant-in-Aid for Scientific Research (C): Kuremoto K: Development of innovative prevention care of peri-implantitis targeting sphingomyelin and lipid raft. (Grant No. 16K11592). ¥1,300,000

4: MEXT Grant-in-Aid for Scientific Research (B): Okazaki Y: Development of a new mouth wash aiming at reducing the risk of ventilator-associated pneumonia. (Grant No. 17K17172). ¥1,820,000

5: MEXT Grant-in- Aid for Young Scientists (B): Mori T: Development of new inspection of food crush performance to provide elderly persons needing long-term care with an appropriate dietary form. (Grant No. 17K17171). ¥1,400,000

6: MEXT Grant-in-Aid for Scientific Research (Support for Starting Research Activities): Hiraoka A: Elucidation of the optimal period of PAP therapy aiming at oral ingestion by ALS patients. (Grant
No. 16H07002). ¥1,560,000

(5) Academic Awards, etc.


(6) Patents

Return to Contents
• Department of Advanced Prosthodontics  
• Division of Preventive and Restorative Dentistry  
(Department of Prosthetic Dentistry)

(1) Staff and Students

Professor: Kazuhiro Tsuga  
Associate Professor: Hitoshi Abeura, Mitsuyoshi Yoshida  
Assistant Professor: Kazuya Doi, Kouji Morita, Hiroki Tsuka, Yusuke Makihara  
Resident: Kazuko Kagawa, Chiaki Higa, Keisuke Yasuda, Yosifumi Oki, Hiromichi Kawano  
Graduate Student: Azusa Kuroki, Miyuki Yokoi, Reiko Kobatake, Miwa Sasaki, Fumiko Nishio, Hanako Umehara  
Clinical Trainee: Tomoharu Hori, Sachiko Takagi, Wataru Teshima  
Administrative staff: Michiko Miyagawa

(2) Main Research Activities

1: Covariance structure analysis of sleep, diurnal bruxism, sociopsychological and TMD  
2: Clinical assessment of CAD/CAM produced crown with hybrid resin (Sera Smart) for molar teeth  
3: Exploration of amelogenic stem/progenitor cells for tissue-engineered tooth.  
4: The roles of FGFR2b signaling in the regenerative capacity of tooth and bone.  
5: Study of occlusal-supporting ability of individual maxillary and mandibular teeth  
6: Relation between prosthetic treatment and general condition in elderly with dementia.  
7: Establishment of bone regeneration by using interconnected porous hydroxyapatite and biopolymeric material  
8: Study on the dental materials

(3) Research Achievements

A) Original Papers (including Case Reports)

2: Accelerating effects of cellulose in the removal of denture adhesives from acrylic denture bases:


14. Multicentered epidemiological study of factors associated with total bacterial count in the saliva


B) Review d

C) Publications

D) Other Publications
1: Novel porous titanium biomaterial with three dimensional structure: Doi K. PHARM STAGE, 17:41-7, 2017

E) Presentation at Scientific Meeting


7: Relationship between eating and swallowing function, protein intake and nutritional condition in elderly people requiring long-term care: Kuroki A, Mori T, Kawano H, Yoshikawa M, Tsuga K: The 58th Scientific Meeting of the Japan Society of Stomatognathic Function (Tokushima), 2017.


2017


F) Special lectures in academic meetings


G) Others

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

1: MEXT Grant-in-Aid for Scientific Research (C): Doi K: Establishment of bone quality improvement therapy using intelligent artificial bone: (Grant No. 15K11160). ¥1,820,000

2: MEXT Grant-in-Aid for Scientific Research (C): Morita K: Fabrication of porous titanium with honeycomb structure. (Grant No. 16K11594). ¥1,100,000

3: MEXT Grant-in-Aid for Scientific Research (C): Kagawa K: Functional analysis of novel soluble FGFR receptor is derived from the bone and cartilage and application to regeneration. (Grant No. 17K11804). ¥1,400,000

4: MEXT Grant-in-Aid for Scientific Research (C): Yoshikawa M, Tsuga K, Yoshida M, Kayashita J, Kimura H: Can the early detection and early improvement of oral frailty stop the frailty? (Grant No. 16K11887). ¥1,300,000

5: MEXT Grant-in-Aid for Young Scientists (B): Makihara Y: Bone regeneration therapy with bone remodeling controlled artificial bone in diabetic conditions. (Grant No.16K20503). ¥1,950,000

6: The 2017 Industry-academia collaborative young researcher support program: Doi K: New development of cell control functional micromesh titanium membrane. ¥200,000

(5) Academic Awards, etc.


(6) Patents

• Department of Orthodontics and Craniofacial Development Biology
• Division of Oral Health and Development
(Department of Orthodontics)

(1) Staffs and Students

Professor : Kotaro Tanimoto
Associate Professor : Hiroshi Ueda, Masato Kaku
Lecture : Ryo Kunimatsu
Assistant Professor : Yuki Asakawa, Naoto Hirose, Yuki Yoshimi, Tetsuya Awada
Intern : Yuji Tsuka, Hiromi Sumi, Tomomi Date, Kayo Horie, Takaharu Abe, Saki Okita, Hidemi Gunji, Yuko Nakao
Professor(part-time) : Kazuo Tanne, Eiji Tanaka, Ichiro Takahashi
Registered Intern : Kuniaki Tanaka, Kazunori Itatani, Eri Ohtani, Eri Fujii, Nanae Oki, Hirotaka Sugino, Yu Matsumura, Shoutoku Kojima
Dental Hygienist : Miho Okada, Aya Tokui

(2) Main Research Activities

1. Elucidation of pathogenic mechanism in malocclusion and management of oral maxillofacial skeletal growth
2. Optimization of tooth movement by orthodontic force
3. Establishment of a new orthodontic treatment based on the image and biochemical diagnosis of temporomandibular disorders (TMD)
4. Application of regeneration medicine to orthodontic treatment
5. Suppression of caries risk in orthodontic treatment
6. Evaluation of the contribution of various oral functions to general fitness
7. Development of new instruments and materials for orthodontic treatment
(3) Research achievements

A) Original Papers (including Case Reports)


B) Review


C) Publications

D) Other Publications

1. Tanimoto K: Greeting. Public relations magazine in Hiroshima University Hospital, 2017.

2. Tanimoto K: Treatment of cleft lip and/or palate for orthodontists – To widen the circle of smile-, bulletin of meeting of friends with cleft lip and/or palate, 2017.

E) Presentation at Scientific Meeting


3. Comparison of stem cells from human exfoliated deciduous teeth (SHED) and bone marrow stem cells (BMSCs) for bone regeneration in a calvarial bone defect of immunodeficiency mice: Nakajima K., Kunimatsu R., Abe T., Ando K., Tanimoto K.: The 50th Annual Meeting of the Hiroshima University Dental Society (Hiroshima), 2017.


8. Two case of mandibular prognathism with open bite by surgical correction with glossectomy: Date T., Nakao Y., Ueda H., Tanimoto K.: The 30th TAO Annual Meeting (Kaohsiung), 2017.


F) Special lectures in academic meetings

1. Tanimoto K: Temporomandibular Disorders and Orthodontic Treatment—Diagnosis and Systematic Approach—: Special lecture in Padjadjaran University (Bandung), 2017.


5. Tanimoto K: A benefit given from the orthodontic anchor screw and a new possibility: 9th WIOC, Kobe, 2017.

6. Tanimoto K: Treatment of cleft lip and/or palate for orthodontists —To widen the circle of smile—, 2017 regular meeting of friends with cleft lip and/or palate, Tokyo, 2017.

7. Tanimoto K: Correspondence to temporomandibular joint osteoarthritis—whether or not the orthodontic treatment should be initiated, Hiroshima Orthodontic Association, Hiroshima, 2017.

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

5. Grant-in-aid for Scientific Research (B): Date T.: Designed SDF-1chimeric protein for bone tissue regeneration.2470,000yen.
9. Grant-in-aid for Scientific Research(B): Sumi k.: Development of the treatment for patients with jaw cleft by bone regenerative technologies using mesenchymal stem cells derived different origins and semiconductor lasers. 2080,000yen.


11. Grant-in-aid for Scientific Research(B): Awada T.: Application to periodontal tissue regeneration by a new amelogenin peptide combined with mesenchymal stem cells derived from dental pulp and adipose. 1950,000yen.


(5) Academic Awards, etc.


(6) Patents
• Department of Oral & Maxillofacial Radiology
• Division of Oral and Maxillofacial Surgery and Oral Medicine (Department of Oral and Maxillofacial Radiology)

(1) Staff and Students

Professor : Naoya Kakimoto
Associate Professor : Minoru Fujita
Associate Professor/Lecturer : Yoshikazu Suei, Takashi Nakamoto
Assistant Professor : Toshikazu Nagasaki, Masahiko Ohtsuka, Masaru Konishi, Masahiko Sawajiri, Verdonschot R.G.

(2) Main Research Activities

1: Radiographic diagnosis of oral diseases
2: Radiographic study on mandibular osteomyelitis
3: Study of radiation dosimetry in X-ray region for diagnosis
4: Study on the videofluoroscopic examination of swallowing
5: Radiation effects of heavy ion particles on bone metabolism
6: Improvement of treatment results in the radiotherapy for oral cancers
7: Radiographic study to screen osteoporosis using panoramic radiographs of the jaw
8: Speech production in the human brain.

(3) Research Achievements

A) Original Papers (including Case Reports)

4: Initial Report of the Attempt to Develop New Oral Assessment as Information Sharing with
C) Publications


D) Other Publications


E) Presentation at Scientific Meeting

1: Correlations between T2-values and VAS scores in TMJ Disorder Patients: Kakimoto N., Shimamoto H.,


joint meeting of 58th Annual Meeting of the Japanese Society of Neurology and XXIII World Congress of Neurology (Kyouto), 2017

12: Examination of airway from change in the mandibular setback surgery assessed with the multislice computed tomography: Iwai H., Ueda H., Murakami S., Cynthia C., Nagasaki T., Tanimoto K: The joint meeting of the 56th annual meeting of Hiroshima Prefectural Dental Association and The 101th annual meeting of Hiroshima University Dental Society (Hiroshima), 2017.


F) Special lectures in academic meetings


(6) Patents

• Department of Biological Endodontics
• Division of Preventive and Restorative Dentistry
  (Department of Endodontics and Operative Dentistry)

(1) Staff and Students

Professor : Hideki Shiba
Associate Professor, Lecturer : Shigeki Suzuki
Assistant Professor : Naoyo Motoyama, Shintaro Nagayasu, Shizu Tsuchiya,
                          Seiji Kobuke, Satoru Shindo
Resident : Noriko Saito
Graduate Student : Jun Nakanishi, Kazuma Yoshida

(2) Main Research Activities

1: Studies on biological regeneration of dentin/pulp complex and periapical tissues
2: Studies on pulp regeneration by regulation of inflammation
3: Studies on biological obturation of root canals at apical areas
4: Studies on development of a new therapeutic agent for intractable pain

(3) Research Achievements

A) Original Papers (including Case Reports)

1: A novel gingival overgrowth mouse model induced by the combination of CsA and ligature-induced
2: Useful immunochromatographic assay of Calprotectin in gingival crevicular fluid for diagnosis of
diseased sites in patients with periodontal diseases: Kido J., Murakami S., Kitamura M., Yanagita M.,
Tabeta K., Yamazaki K., Yoshie H., Watanabe H., Izumi Y., Suda R., Yamamoto M., Shiba H., Fujita
3: A suspected case of allergic effects of the room temperature curing resin for dental use : Kitagawa M.,
Kuremoto K., Shintani T., Ogawa I., Shiba H. : Journal of Japanese Society for Evidence and the
Dental Professional, 9, 17-21, 2017
4: A case report: Apical barrier formation at the apical area after extended-period application of
calcium hydroxide : Nagahara T., Takeda K., Iwata T., Shiba H : The Journal of Japan Endodontic


B) Reviews

C) Publications


D) Other Publications


E) Presentation at Scientific Meeting

1: Extracellular miRNA causes neuropathic pain via spinal TLR7 in peripheral nerve injury: Morita K, Motoyama N, Dohi T: The 90th Annual Meeting of the Japanese Pharmacological Society (Nagasaki), 2017


2017


F) Special lectures in academic meetings


5: Support for dental treatment of HIV-positive patients in Hiroshima University Hospital: Shiba H.: Dental ICT seminar of Kagoshima University Hospital (Kagoshima), 2017.


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

1: 1: Grant-in-Aid for Scientific Research (B): Shiba H.: Usefulness of the complex of the three regenerative elements as a therapeutic agent for regeneration against endodontic diseases: No. 15H05022, ¥ 3,400,000

2: 2: Research grants: Grants for research received from Hiroshima Prefecture: Shiba H.: Study on network-construction of dental practice for HIV infection: ¥3,000,000

3: Grant-in-Aid for Scientific Research (C): Suzuki S.: Induction of cellular proliferation and differentiation of dental pulp cells by newly identified long non-coding RNA: No. 16K11551, ¥1,400,000

4: Grant-in-Aid for Scientific Research (C): Motoyama N.: Role of the novel Platelet-Activating factor (PAF) synthetase LPCAT2 on chronic pain: No.16K11550, ¥1,400,000

5: Grants-in-Aid for Scientific Research (C): Tsuchiya S.: Development of endodontic treatment through the NF-κB inhibition by the NSAID repositioning: No.17K11706, ¥1,200,000.

6: Grants-in-Aid for Young scientists (B): Nagayasu S.: Elucidation of the induction mechanism of TNF-α expression from macrophages by dental pulp cell specific factors: No.16K20456,
7: Grants-in-Aid for Young scientists (B): Saito N.: Elucidation of the influence of sustained stimulation of GDNF on the survival and inflammatory response of odontoblasts and osteoblasts: No.16K20460, ¥1,170,000

8: Grants-in-Aid for Young scientists (B): Kobuke S.: Elucidation of the anti-inflammatory mechanism by Phosphophoryn: No.17K17135, 1,400,000

9: Grant-in-Aid for Research Activity start-up: Shindo S.: Elucidation of the inflammation control mechanism of IL-35 in apical periodontitis: ¥1,100,000

10: General foundation Ryokufukai The year of 2017 education and research prize for encouragement (Grant for young researcher grant): Yoshida K.: Antimicrobial effect of Heparin-LL37 hybrid: ¥500,000

(5) Academic Awards, etc.

(6) Patents
• Department of Dental Anesthesiology
• Division of Oral & Maxillofacial Surgery and Oral Medicine
  (Department of Dental Anesthesiology and Orofacial Pain Management)

(1) Staff and Students

Professor: Irifune Masahiro, D.D.S., Ph.D.
Lecturer: Yoshida Mitsuhiro, D.D.S., Ph.D.

(2) Main Research Activities

1: Study on mechanisms of general anesthetic action
2: Development of a novel general anesthetic method applying enhancement of descending pain suppression system
3: Study on role of each neuron in an intravenous anesthetic agent-induced anesthetic factor
4: Study on a stage of delirium in general anesthesia
5: Study on involvement of dopamine neurons in awakening from general anesthesia
6: Study on antianxiety effects of sedative drugs
7: Study on effects of nitrous oxide on cardiovascular system
8: Study on chronic pain
9: Study on efficacy of chest compressions in cardiopulmonary resuscitation
10: Study on medical 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


3: Effects of intravenous anesthetics on Substance P release from dorsal horn of the spinal cord in rats: Mukai T, Ogawa Y, Irifune M: The 31th Scientific Meeting of Dental Anesthesiology in Chugoku and Shikoku Branch (Tokushima), 2017.


F) Special lectures in academic meetings

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


2: Grant-in-Aid No. 17K17254 for Young Scientists (B) from the Ministry of Education, Culture, Sports, Science, and Technology of Japan (New): Oue K: Study on brown adipocytes molecules mechanism for obesity control. ¥1,700,000.

3: Grant-in-Aid No. 17K11908 for Scientific Research (C) from the Ministry of Education, Culture, Sports, Science, and Technology of Japan (Continued): Doi M: Functional brain imaging evaluation of treatment effect of cognitive behavioral therapy and antidepressant drugs on glossodynia. ¥1,600,000.

(5) Academic Awards, etc.

(6) Patents

Return to Contents
Department of Public Oral Health

(1) Staffs and Students

Professor : Masaru Sugiyama
Associate Professor : Maki Nosou, Atsushi Shimazu (Department), Hideo Shigeishi
Assistant Professor : Eri Fukada, Yuko Kurawaki
Graduate Student : Tomoko Kawano, Yuka Wakabayashi, Maruyama rika, Sanae Miyoshi, Yukiko Nagashima, Yuumi Endo, Yoshino Kaneyasu(M2), Ayaka Takahashi(M1)
Undergraduate Student: Mari Matsumura, Kanako Oda, Mika Motoshige, Kaede Takeuti, Mariko Nakamura, Hinano Takada (4th grade student), Amane Oshima, Misaki Morooka, Mai Okawa, Ayaka Kimura, Moe Kawata, Miho Ikeda, Mikiho Ise, Asuka Takemoto, Ayana Shinozaki, Mayu Etsuki, Shoko Kimura, Suzuko Ishikawa(3rd grade student)

(2) Main Research Activities

1 : Study on oral care
2 : Study on oral functions in the elderly
3 : Study on human papillomavirus in oral squamous cell carcinoma
4 : Study on the activities of oral health at school

(3) Research Achievements

A) Original Papers (including Case Reports)


4 : Clinical studies of dentigerous cysts during past 10 years in our department : Kubozono K, Ono S, Ohta K, Higashikawa K, Shigeishi H, Ogawa I, Takechi M.: Journal of Hiroshima University Dental


B) Review


C) Publications


D) Other Publications


E) Presentation at Scientific Meeting


8: Educational effect of clinical training on perioperative oral function management at university.
19 : Examination of the oral function related to splash distance of bean on the Splash Bean Test : Higashi


F) Symposium of academic conference, special lecture

G) Contribution to Community


3: Fukada E: Refresher course for dental hygienists: Hiroshima University (Hiroshima), 2017.7.20.

4: Fukada E: Program for high school students: Hiroshima University Faculty of Dentistry: Hiroshima University (Hiroshima) 2017.8.1.

5: Fukada E: Program for junior high-school student: Hiroshima University Faculty of Dentistry:
6. Fukada E: Program for kids from elementary schools, Dental Kids, “Let’s Be a Dentist!”:
Hiroshima University Faculty of Dentistry: Hiroshima University (Hiroshima), 2017.8.17.

7. Fukada E: Refresher course for dental Hygienists: Hiroshima University (Hiroshima), 2017.8.18.


10. Fukada E: The services to improve oral function are provided in Hiroshima prefecture "Lecture of the oral health” : Motomachi central meeting place (Hiroshima), 2017.10.20.


15. Kawano T: Hyogo Dental Hygiene Society Hanshin North branch workshop "Collaboration of dental hygienists within clinical path operation area in Hanshin North Medical Zone" (Hyogo) 2017.


17. Kawano T: A workshop for medical and nursing care workshops "Physical health is from your mouth" (Hyogo) 2017.


20. Miyoshi S: Hiroshima prefecture regional rehabilitation specialist job dispatch support project: "Project of care prevention tackling with dental hygienist, public health nurse and administrative nutritionist", (Hiroshima), 2017.2.5, 3.5.

21. Miyoshi S: Lecture of oral health care at special nursing home “Hartful Takehara-chuo” (Hiroshima) 2017.6.26

22. Miyoshi S: Oral Health Activities in Mihara city. Project of care prevention, basic course. : Lecture "The sign of aging is in your mouth" (Hiroshima), 2017. 6.26, 10.24.

23. Miyoshi S: Lifestyle disease prevention lecture (Takehara one-two health course): Lecture "Health is from the mouth" (Hiroshima) , 2017.7.28.

24. Miyoshi S: Hiroshima prefecture home health welfare activist meeting, Workshop on Palliative Care Special Committee.: Lecture " Collaboration with multi-occupational activities in the community"
2017

(Hiroshima), 2017.9.1.
29 : Miyoshi S : Takehara · Toyota Dental Hygiene Liaison Committee Secretary.
32 : Takahashi A : Program for junior high-school student: Hiroshima University Faculty of Dentistry: Hiroshima University (Hiroshima), 2017.8.17.
33 : Takahashi A : Program for kids from elementary schools, Dental Kids, “Let's Be a Dentist!”: Hiroshima University Faculty of Dentistry: Hiroshima University (Hiroshima), 2017.8.18.

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

1 : Grants-in-Aid for Scientific Research (Scientific Research (C)) : Shigeishi H : Study on the mechanisms of regulation of cancer stem cell properties via mechanical stress in oral squamous cell carcinomas. (No. 17K11837). ¥1,100,000.
3 : Grant-in-Aid for Young Scientists (B) : Fukada E : Establishment of diagnostic system for sucking and swallowing using intraoral pressure measurement.(No. 16K20502).¥1,300,000.

(5) Academic Awards, etc.


(6) Patents

Return to Contents
Department of Maxillofacial Functional Development

(1) Staff and Students
Professor: AMANO Hideaki
Research Associate: TSURUDA Keiko
              NISHIMURA Rumi
Graduate Student: MAEHARA Tomoko
                   HIGASHI Mayuka
                   MATSUDA Saki
                   CHOU JAN

(2) Main Research Activities
1: Clinical research of the growth and development of dento-maxillofacial complex in children
2: Study on the Dentistry for children and disabilities
3: Study on the School dental health
4: Study on the activation of the function of salivary glands
5: Study on the methods for Oral health care
6: Study on the education program for Oral health
7: Study on the development of oral function
8: Study on the intra-oral pressure for swallowing
9: Study on education program for graduate dental hygienists
10: Study on the Mechanism of Aggregatibacter actinomycetemcomitans-CDT complex formation and secretion

(3) Achievements
A) Original Papers (including Case Reports)
1 : Consideration of teaching Effectiveness learning Practical Training of Clinical Medicine in Training
   Course of Yogo Teacher: Maki Nosou, Atsushi Shimazu, Akemi Naitou, Eri Fukada, Rumi Nishimura,
   Atsue Matsumoto, Yoshi Niitani, Toshinobu Takemoto, Tomoko Maehara, Hideaki Amano and

2 : Consideration of Maximum Intra Oral Pressure in Sucking Action in Adult: Eri Fukada, Rumi

3 : Results of a Questionnaire Survey for Yogo-Teachers Graduated from Hiroshima University School of


B) Review

C) Publications

D) Other Publications


2: Efforts of Hiroshima University, Faculty of Dentistry, School of Oral Health Sciences: Masaru Sugiyama, Rumi Nishimura, Eri Fukada, Mitsuhiro Tamamoto, Tsuyoshi Taji, Saiji Shimoe, Atsue Matsumoto, Yoshie Niitani, Hisako Sasahara, Atsushi Shimazu, Takahiro Syutou, Sumiyo Mimura,

E) Presentation at Scientific Meeting


7: Relationship between oral health condition and opportunity for dental examination of primary school student and parent's conscious dentistry: Atsushi Shimazu, Ai Matsushige, Ayaka Takahashi, Rumi Nishimura, Marie Naitou, Takeru Watanabe, Mao Taniguthi, Takashi Ueoka, Masaru Sugiyama: The 39th general meeting of Kyusyu Society for Oral Health (Saga), 2017.


9: Problem-Solving Oriented Training Program for Advanced Medical Personnel: Team medical program in the nursing facility: Rumi Nishimura, Eri Fukada, Yoshiie Niitani, Atsue Matsumoto, Masaru Sugiyama: The 28th general meeting of Kinki, Chugoku, Shikoku Society for Oral Health


13: Examination of the possibility of the Splash Bean Test as the screening method of the oral function: Mayuka Higashi, Rumi Nishimura, Rei Fukada, Sayaka Hama, Yayoi Kanehisa, Kumiko Hara: The 6th Kobe Tokiwa Academic Forum (Hyogo), 2017.

14: Investigation of the oral cavity function related to power to open the mouth wide: Yayoi Kanehisa, Sayaka Hama, Mayuka Higashi, Rumi Nishimura, Eri Fukada, Kumiko Hara: The 6th Kobe Tokiwa Academic Forum (Hyogo), 2017.


17: Problem-Solving Oriented Training Program for Advanced Medical Personnel: Operation support program by the dental technician: Tsuyoshi Taji, Rumi Nishimura, Eri Fukada, Atsue Matsumoto, Masaru Sugiyama, Hiroki Nikawa: The 101th Regular Meeting of Hiroshima University Dental Society (Hiroshima), 2017.


19: Study on classes about the mouthwash solution to the dental hygienist students: Kumiko Hara, Mayuka Higashi, Yayoi Kanehisa: The 8th Annual Meeting of the Japan Society for Dental Hygiene Education (Osaka), 2017.
F) Lectures
4: Rumi Nishimura: Hiroshima Prefecture Dental Hygienist Education Study Group: “Education in program of Oral Health Sciences, School of Dentistry and Oral Health Sciences Major, Graduate School of Biomedical & Health Sciences, Hiroshima University and its achievements” (Hiroshima), 2017.
5: Rumi Nishimura: The meeting of Dental Hygienist Education: “IPE on Hiroshima University” (Hiroshima), 2017.
7: Rumi Nishimura: Lecture for the class for diabetics: Hiroshima Teishin Hospital (Hiroshima), 2017.
8: Rumi Nishimura: Refresher course for dental hygienists: “Oral management of patients with hypertension and kidney dialysis patients” (Hiroshima), 2017.
9: Rumi Nishimura: The services to improve oral function are provided in Ujina city (Hiroshima), 2017.

G) Social Contributions
1: Keiko Tsuruda, Rumi Nishimura: Program for high school students: Hiroshima University Faculty of Dentistry: Hiroshima University (Hiroshima), 2017.08.01.
2: Hideaki Amano: Program of Teacher’s license update class: Hiroshima University (Hiroshima), 2017.08.04.
3: Keiko Tsuruda, Rumi Nishimura: Program for junior high-school student: Hiroshima University Faculty of Dentistry: Hiroshima University (Hiroshima), 2017.08.18.
4: Keiko Tsuruda, Rumi Nishimura: Program for kids from elementary schools: Dental Kids: Hiroshima University Faculty of Dentistry: Hiroshima University (Hiroshima), 2017.08.19.
5: Tomoko Maehara: Food education promotion cooperation meeting chairperson in Tamana city (Kumamoto), 2017.
6: Tomoko Maehara: Assessment of oral function for citizens at the health and food education fair in
Tamana city (Kumamoto), 2017.11.26.

8 : Rumi Nishimura: The oral care of persons requiring nursing care at Hiroshima University Hospital, 2017.

(4) Status of Receiving Grants-in Aid for Scientific Research, etc.
1 : Research grant (FUTOKU foundation) : Rumi Nishimura : Effect of the joint training for dental health guidance : ¥300,000
2 : Collaborative research : Rumi Nishimura : Association between oral function and eating habits of the university student : Kobe Tokiwa University
3 : Collaborative research : Rumi Nishimura : Examination of the possibility of the Splash Bean Test as the screening method of the oral function : Kobe Tokiwa University

(5) Academic Awards, etc.

(6) Patents
Department of Anatomy and Functional Restorations

(1) Staff and Students

Professor : Takahiro Satoda
Associate Professor : Saiji Shimoe
Graduate Students : Tzu-Yu Peng(Taiwan), Miyu Taniguchi, Haruki Syouga
Undergraduate Student : Risa Ito, Miyu Takaki, Yuki Kuronotsubo, Yousuke Imaizumi, Yuki Wakabayashi, Kana Kobayashi, Hiroto Takenaka, Mio Matsumura, Kouhei Matsusima, Rinka Takahasi, Kanako Fujita, Nana Sunahata, Yumi Yasuyoshi, Saki Okamoto, Ryouhei Yamamoto, Teruo Kobayashi
Research Student : Shogo Iwaguro

(2) Main Research Activities

1 : Development of Effective model for anatomy education
2 : Morphological Research on masticatory neuronal network
3 : Study on dental materials for esthetic
4 : Study on new clinical application using novel dental ceramic
5 : Study on objective evaluation using the three-dimensional image

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review
C) Publications


D) Other Publications

E) Presentation at Scientific Meeting


2: Effects of Disinfection of Agar-Alginate combined Impressions to Stone Models : Kana Kobayashi1, Saiji Simoe, Takuya Kihara, Ayaka Kihara, Haruki Syoga, Toshinobu Takemoto, Takahiro Satoda, The 6th International Congress of Dental Technology. The 39th the meeting of the Nippon Academy of Dental Technology (Taiwan), 2017.5.27,28.


4: Influence of Different Surface Treatments of Lithium Silicate Glass Ceramics on Bond Strength to a Resin Cement : Risa Ito, Saiji Shimoe, Tetsuya Matsui, Mai Otaku, Takahiro Satoda, The 6th International Congress of Dental Technology, The 39th the meeting of the Nippon Academy of Dental Technology (Taiwan), 2017.5.27,28.

5: Effectiveness of Micro Mechanical Retention with Diode Laser Beam on Bonding between Zirconia and Indirect Composite : Hirot Takenaka, Saiji Simoe, Shogo Iwaguro, Isao Hirata, Takeshi Murayama, Takahiro Satoda, The 6th International Congress of Dental Technology, The 39th the meeting of the Nippon Academy of Dental Technology (Taiwan), 2017.5.27,28.


7: Effect of Micro Slit on the Bond Strength of Veneering Porcelain to Zirconia : Shogo Iwaguro1, Saiji
Shimoe, Isao Hirata, Takeshi Murayama, Takahiro Satoda, The 6th International Congress of Dental Technology, The 39th the meeting of the Nippon Academy of Dental Technology (Taiwan), 2017.5.27,28.

8 : Investigation of Manufacturing Surgery Support Solid Model (3D model) made in Central-Dental-Laboratory of Hiroshima University Hospital : Yukihiro Takayama1, Saiji Shimoe, Shogo Iwaguro, Takeshi Murayama, Ryoji Katou1, Hiroki Nikawa, The 6th International Congress of Dental Technology, The 39th the meeting of the Nippon Academy of Dental Technology (Taiwan), 2017.5.27,28.


10 : Functional model of Vocal cords: Miyu Takaki, Yuki Kuronotubo, Saiji Shimoe, Takahiro Satoda, The 72nd Annual Meeting of Japanese Association of Anatomist, Cyugoku-Shikoku regional meeting (Hiroshima), 2017.10.28

11 : The educational model for molar teeth carving : Yuki Kuronotubo, Miyu Takaki, Saiji Shimoe, Takahiro Satoda, Scientific Meeting of Hiroshima Prefecture Dental Association, Hiroshima University Dental Society, Nippon Academy of Dental Technology Chugoku and Shikoku branch, 2017.10.29.

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

1 : Grant-in-Aid for Scientific Research(C): (representative) Saiji Shimoe, (member) Takahiro Satoda, Isao Hirata: Development of the new micro-retention for expansion of clinical application of zirconia. (No.16K11593), ¥ 1,300,000

(5) Academic Awards, etc.

1 : Hiroto Takenaka: The 19th Student’s Carving Contest, Gold Award, 2017.3.23
2 : Yuki Wakabayashi: The 19th Student’s Carving Contest, Silver Award, 2017.3.23
3 : Risa Ito: The 19th Student’s Carving Contest, Bronze Award, 2017.3.23
4 : Kana Kobayashi: The 19th Student’s Carving Contest, Fighting-spirit Award, 2017.3.23

(6) Patents
Department of Medical System and Biomaterial Engineering

(1) Staff and Students

Professor : Takeshi Murayama
Associate Professor : Mitsuhiro Tamamoto
Graduate Student : Memori Minoda, Yuuta Masuhara, Moe Matsuo, Shunsuke Suzuki, Hiroki Yanase
Graduation Research Students : Shota Imai, Marina Gurita, Momoko Kawada, Kousei Tabira, Kentaro Nakamura, Riho Kawaguchi, Fuka Saibara, Rikuto Yamada

(2) Main Research Activities

1: Application of manufacturing system technologies (e. g., CAD/CAM, 3-d printing) to dentistry
2: Application of artificial intelligence to dentistry
3: 3-d modeling and computer simulation in dentistry
4: Simulation-based analysis of work processes in dental technology
5: Development and clinical applications of oral appliances for treatment and protection
6: Study on esthetic dentistry
7: Study on dental education
8: Study on sports dentistry (mouthguards)

(3) Research Achievements

A) Original Papers (including Case Reports)

3: Job shop scheduling for meeting due dates and minimizing overtime with the constraint of the number of operators: Eguchi T., Ohama K., Daido T., Murayama T.: Proceedings of the 9th International


B) Review

C) Publications


D) Other Publications


E) Presentation at Scientific Meeting


8: Education in program of Oral Health Sciences, School of Dentistry and Oral Health Sciences Major,


11: Job shop scheduling with capacity adjustment with consideration to the constraint of the number of operators- Application of shift divided optimization-: Ohama K., Eguchi T., Murayama T.: 2017 Annual Congress of The Japan Society of Mechanical Engineers (Saitama), 2017.


13: Job shop scheduling for meeting due dates and minimizing overtime with the constraint of the number of operators: Eguchi T., Ohama K., Daido T., Murayama T., 9th International Conference on Leading Edge Manufacturing in 21st Century (LEM21) (Hiroshima), 2017.

14: Orthodontic evaluation of the long-term stability cases in which orthodontic treatment and implant prosthesis treatment were given to the patients with a lot of teeth lacks: Eguchi T., Ono S., Ichiden E., Tamamoto M., Nomoto K., Shibasaki R.: The 76th Annual Meeting of the Japanese Orthodontic Society (Sapporo), 2017.

F) Special Lectures in Academic Meetings


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

(5) Academic Awards, etc.


(6) Patents
Department of Oral Biology & Engineering

(1) Staff and Students

Professor : Hiroki Nikawa
Associate Professor : Tsuyoshi Taji
Lecturer : Hisako Sasahara
Assistant Professor : Sumiyo Mimura
(Special Appointment)
Education and Research Support Staff : Kaori Taguchi, Marika Kanda
Research Student : Kazuko Kawahara
Graduate Student : Yukihiro Takayama, Satoshi Miyauchi, Natsumi Saizaki, Konomi Hirota, Ai Fujii, Keisuke Fujita, Sakura Omori, Marika Kanda, Riona Doi, Nishiki Arimoto
Undergraduate Student : Tomoya Suehiro, Kazuki Sanetoshi, Yurina Akita, Rei Ito, Kimika Endo, Mina Ishida, Mako Shinoda, Yuki Kono, Honami Oki, Akari Kumagai, Ouchi Noriko, Sumire Miyawaki, Atsushi Takata

(2) Main Research Activities

1 : Study on candidal biofilms and denture plaque
2 : Study on dental caries and probiotics
3 : Design for cationic antimicrobial peptides
4 : Study on mechanisms of the alveolar bone resorption
5 : Development of bone-resorption inhibitors
6 : Study on dental implant materials
7 : Collaborative research about allergy
8 : Study on digital dentistry
9 : Collaborative research about aortic aneurysm
10 : Development of oral function devices
11 : Analysis of food texture

(3) Research Achievements

A) Original Papers (including Case Reports)

1 : Accelerating effects of cellulase in the removal of denture adhesives from acrylic denture


B) Review

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting

1: Gene Expression of Candida albicans during Biofilm Formation; Kazuki Sanetoshi, Tatsumi Hashida, Sumiyo Mimura, Tsuyoshi Taji, Hiroki Nikawa: The 6th International Congress of Dental Technology / The 39th Meeting of the Nippon Academy of Dental Technology (Taipei), 2017

2: Flow Analysis with an Aortic Aneurysm Silicone Model through Collaboration with Medicine: Yurina Akita, Takuya Kihara, Tatsuya Kurosaki, Shinji Ninomiya, Tsuyoshi Taji, Taijirou Sueda, Hiroki Nikawa: The 6th International Congress of Dental Technology / The 39th Meeting of the Nippon Academy of Dental Technology (Taipei), 2017

3: Investigation of Manufacturing Surgery Support Solid Model (3D model) made in Central-Dental-Laboratory of Hiroshima University Hospital: Yukihiro Takayama, Saiji Shimoe, Shogo Iwaguro, Takeshi Murayama, Ryoji Kato, Hiroki Nikawa: The 6th International Congress of Dental Technology / The 39th Meeting of the Nippon Academy of Dental Technology (Taipei), 2017

F) Symposium and special lecture

1: A novel product for the general or oral health derived from biofilm study: Hiroki NIKAWA: 8th Internet of Things Expo, Santa Clara Convention Center 1st Floor 「Hall A」 (California the US), 2017

(4) Status of Receiving Grants-in Aid for Scientific Research, etc.
1: Grants-in-Aid for Scientific Research (Scientific Research (B)) : Hiroki Nikawa (Head), Tsuyoshi Taji (Co-investigators), Research Project Number: 15H05027. ¥2,800,000
2: Donation from JEX CO.,Ltd to Hiroki Nikawa. ¥300,000
3: Donation from ROHTO Pharmaceutical Co., Ltd. to Hiroki Nikawa. ¥300,000
4: Donation from Shikoku nyugyou corporation to Hiroki Nikawa. ¥300,000
5: Donation from Bizen Chemical Co.,Ltd to Hiroki Nikawa. ¥300,000
6: Collaborative Research budget from Mikakuto Co.,Ltd to Hiroki Nikawa. ¥900,000

(5) Academic Awards, etc.

(6) Patents

1: Hiroki Nikawa : (US Patent) ANTIBACTERIAL AGENT COMPOSITION AND ANTIVIRAL AGENT COMPOSITION COMPRISING SILICON – CONTAINING COMPOUND; ANTIBACTERIALIZING METHOD, CLEANING/MOUTH RINSING METHOD; METHOD FOR FIXING ANTIBACTERIAL AGENT AND ANTIVIRAL AGENT (NO.9609872) (Hiroshima University)
2: Hiroki Nikawa : (EPC Patent) Prophylactic, Ameliorating Or Therapeutic Agent For Oral Diseases (NO. 2455095) (Hiroshima University)
Central Research Laboratory

(1) Staff and Students

Director : Chisa Syukunami (by-work)
Assistant Professor : Ikue Hayashi

(2) Main Research Activities

1 : Proteomic analysis using mass spectrometry
2 : Structural analysis of biologically active substances

(3) Research Achievements

A) Original Papers (including Case Reports)


C) Publications

D) Other Publications

E) Presentation at Scientific Meeting


5: One case of the infective endocarditis, simultaneously detected R. dentocariosa and R. musilaginosa by MALDI mass spectrometry and gene analysis: Hisatsune J, Hayashi I, Obama K, Sugai M: The 42nd Hiroshima Association for Infection Disease (Hiroshima) 2017

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

1: Research project, Grant-in-Aid for Scientific Research (C): Hayashi I: Functional analysis of novel acetyltransferase derived from cariogenic bacteria and application to the caries prevention: (No. 15K 110110A) 1,100,000JPY

2: Research project, Grant-in-Aid for Scientific Research (B): Hayashi I (share holder): Elucidation of the restoration control structure of the radiation-induced DNA damage through the chromatin remodeling: (No.15H0281901) 200,000JPY.

(5) Academic Awards, etc.

(6) Patents

Return to Contents
Division of General Dentistry
Department of General Dentistry

(1) Staff and Students
Professor : Hiroyuki Kawaguchi
Assistant Professor: Hiromi Nishi, Taiji Obayashi, Masaru Ohara
Graduate Student : Nami Kikushige

(2) Main Research Activities
1. Research in patient-centered 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
8. Research in taste disorder of patients receiving chemotherapy

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications


D) Other Publications

E) Presentation at Scientific Meeting Original Papers (including Case Reports)


F) Implementation of Seminars / Workshops

G) Lecturer • Symposium


5. Symposium : Nishi H. Effective oral care for treatment support ~ Toward standardization of oral management protocol ~. The 49th Annual Scientific Meeting of the Japan Atherosclerosis Society. (Hiroshima), 2017/07/06.


H) Attending of Lectures, Seminars, and Workshops


I) Implementation of OSCE, CSA

1. 2nd Advanced OSCE for Postgraduate Trainees 2016-2017
2. 1st Advanced OSCE for Postgraduate Trainees 2017-2018

(4) Status of Receiving Grants-in Aid for Scientific Research, etc.
   「Inflammatory mechanisms in oral mucous membrane by H. pylori cells and oral flora change in gastric cancer patients」
2. Nishi H. Grant-in-Aid Scientific Research, Scientific Research (Joint research with Sunstar Japan Inc). 1,754,000Yen.
   「A study on the usefulness of oral management in systemic diseases involving periodontal pathogenic bacteria」

(5) Academic Awards, etc.

(6) Patents

Return to Contents
Division of Oral Health and Development
Department of Oral Health

(1) Staff and Students

Professor: Hideaki Amano, Masaru Sugiyama, Toshinobu Takemoto, Hiroki Nikawa
   (*) Chief: Masaru Sugiyama (by-work)
Associate Professor: Tsuyoshi Taji, Mitsuhiro Tamamoto
Associate Professor/Lecturer: Hisako Sasahara, Hideo Shigeishi, Atsue Matsumoto, Atsushi Shimazu
(Department)
Assistant Professor: Yoshie Niitani, Rumi Nishimura, Eri Fukada
Education and Research Support Staff: Minako Ogawa, Naomi Nakashima, Sanae Miyoshi, Yuko Kurawaki

Please refer to the research achievements of the following each department.
• Department of Public Oral Health: Masaru Sugiyama, Atshi Shimazu, Eri Fukada
• Department of Maxillofacial Functional Development: Hideaki Amano, Rumi Nishimura,
   Minako Ogawa, Naomi Nakashima,
   Sanae Miyoshi, Yuko Kurawaki
• Department of Oral Health Management: Toshinobu Takemoto, Atsue Matsumoto, Yoshie Niitani
• Department of Medical System and Biomaterial Engineering: Mitsuhiro Tamamoto
• Department of Oral Biology & Engineering: Hiroki Nikawa, Tsuyoshi Taji, Hisako Sasahara

(2) Main Research Activities

(3) Research Achievements

A) Original Papers (including Case Reports)

B) Review

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting
F) Special lectures in academic meetings

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

(5) Academic Awards, etc.

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

(1) Staffs and Students

Professor: Katsuyuki Kozai (※) Chief: Katsuyuki Kozai (by-work)
Associate Professor/Lecturer: Yuki Oda (lecturer in Hospital)
Clinical Staff: Chiaki Furutani
Research Student: Chiaki Furutani
Clinical Trainee: Chisato Morimoto, Fumiko Hayashi, Masaki Hayashiuchi, Koichiro Matsumoto, Hiroshi Ootsubo

(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 dental problems of patients with disabled
4: A study on PBL task for dental problem of patients with mental retardation
5: A study on periodontal diseases of patients with disabled
6: A study about the influence of Lactobacillus Rhamnosus on patients caries risk with disabled
7: A study about the influence of Lactobacillus Rhamnosus on patients periodontal risk with disabled

(3) Research Achievements

A) Original Papers (including Case Reports)

2: General anesthetic actions on GABA_A receptors in vivo are reduced in phospholipase C-related catalytically inactive protein knockout mice. : Masaki Hayashiuchi, Tomoya Kitayama, Katsuya Morita, Yosuke Yamawaki, Kana Oue, Taiga Yoshinaka, Satoshi Asano, Kae Harada, Youngnam Kang, Masato Hirata, Masahiro Irifune, Mitsugi Okada, Takashi Kanematsu.: J Anesth. 31:531-538, 2017.
4: Removal of mutans Streptococci from saliva to establish non-cariogenic oral flora A first step on exploring a new method using flow cytometry and cell sorting.: Masaru Ohara, Ikue Hayashi, Yuki


B) Review

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting


E) Special lectures in academic meetings


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

1. Hiroshima University Research Encouragement Award for Female Researchers 2018: Yuki Oda, Effect of bovine milk fermented with Lactobacillus rhamnosus L8020 on periodontal disease in individuals with an intellectual disability. 600 thousand yen.

(5) Academic Awards, etc.

1. Yuki Oda: Hiroshima University Research Encouragement Award for Female Researchers 2018

(6) Patents
Central Clinical Divisions
Special Dental Clinic Section

(1) Staff and Students

Chief Professor : Kotaro Tanimoto
Assistant Professor : Yukimi Yasuhara

(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

F) Special lectures in academic meetings

Lecture
1: Assessment and actuality of Dysphagia Rehabilitation: Yasuhara Y.: Hiroshima pref.
   community-based health care and nursing mutual security project: Workshop of the swallowing
   functional training (Hiroshima) 2017.
2: Assessment and actuality of Dysphagia Rehabilitation: Yasuhara Y.: Hiroshima pref.
   community-based health care and nursing mutual security project: Workshop of the swallowing
   functional training (Kure) 2017.

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

(6) Patents
Central Clinical Divisions  
Center of Oral Clinical Examination

(1) Staffs and Students

Director: Hidemi Kurihara  
Associate Professor: Ikuko Ogawa (Clinic)  
Lecturer: Masae Kitagawa (Clinic)  
Research Associate: Tomoaki Shintani  
Technician: Rie Miyata

(2) Main Research Activities

1 : Diagnostic pathological study on head and neck lesions.  
2 : Study on test and treatment in metal allergy and dry mouth.  
3 : Molecular pathological study on development and progression of oral squamous cell carcinoma.  
4 : Study on molecular target therapy to oral cancer targeted with HBp17/FGFBP.

(3) Research Achievements

A) Original Papers (including Case Reports)


5 : Ameloblastin induces tumor suppressive phenotype and enhances chemosensitivity to doxorubicin


B) Review


C) Publications


D) Other Publications


E) Presentation at Scientific Meeting


F) Special lectures in academic meetings (Symposium)


3: Selection and specificity of myoepithelial/basal cell markers in pathological diagnoses of salivary gland tumors.


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

1: Grants-in-Aid for Scientific Research (C): Shintani T.: Developmental study on treatment for oral cancer treated with ED-71, vitamin D analog, which is a therapeutic agent for osteoporosis. 16K11723, 700,000 yen

2: Grants-in-Aid for Scientific Research (C): Ogawa I.: Pathological and Molecular diagnosis of salivary gland and odontogenic tumors. 17K11614, 1,300,000 yen.

(5) Academic Awards, etc.
Central Clinical Divisions  
Dental Technicians Section

(1) Staff and Students

Director of Dental Technicians Section : Hiroki Nikawa (Prof.)
Assistant Chief Dental Technician : Ryoji Kato
Supervisor Dental Technician : Yoshihiro Otani
Dental Technician : Eisaku Habu, Shogo Iwaguro, Yukihiro Takayama, Meiji Yamamoto, Mai Otaku

(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
7 : Study on dental composite materials for esthetic

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting

2 : Investigation of Manufacturing Surgery Support Solid Model (3D model) made in Central-Dental-Laboratory of Hiroshima University Hospital : Takayama Y, Shimoe S, Iwaguro S,


5: Influence of Different Surface Treatments of Lithium Silicate Glass Ceramics on Bond Strength to a Resin Cement: Risa Ito, Saiji Shimoe, Tetsuya Matsui, Mai Otaku, Takahiro Satoda, The 6th International Congress of Dental Technology, The 39th the meeting of the Nippon Academy of Dental Technology (Taiwan), 2017.


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

(5) Academic Awards, etc.

1. Yukihiro Takayama: The 39th Meeting of the Nippon Academy of Dental Technology outstanding performance award in poster presentation
   「Investigation of Manufacturing Surgery Support Solid Model (3D model) made in Central-Dental-Laboratory of Hiroshima University Hospital」

   「Effect of different surface treatment containing MDP monomer on bonding between zirconia and dental resin」

(6) Patents
Central Clinical Divisions
Dental Hygiene Section

(1) Staff and Students

Director of Dental Hygiene Section : Hidemi Kurihara
Chief Dental Hygienist : Miyuki Nakaoka
Dental Hygienists : Yoriko Iwasaki, Atsuko Wakita, Yukiko Nagatani, Kanako Yano, Tomoko Tokikazu, Miho Okada, Kana Dainobu, Chieko Kawai(Till March), Yurie Nakano, Maiko Kawagoe, Chika Kozono, Yuri Kuramoto, Eri Takano, Yuki Emura, Yuka Wakabayashi, Fumi Tokui, Natsumi Ino, Miku Ishikawa, Yuika Mizota, Ayaka Kai, Mayuko Watari(From April), Momoko Okizono(From April), Ayaka Yoshimoto(From June)
Dental Assistants : Yuka Tamamoto, Keiko Kodani, Yuko Matsuda, Saori Nagamine(From September)

(2) Main Research Activities

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting


F) Lecture

1: Introduction to professionalism research: Nagatani Y.: The 36th General and Scientific Meeting of Japanese Dental Education Association WS [Approach to Ethics / Professionalism Education Practice], (Nagano), 2017.


7: Infection control in Dental clinical site: Nakaoka M.: The 23th Hiroshima infection prevention and
sterilization work study group, (Hiroshima), 2017.

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

(5) Academic Awards, etc.

(6) Patents

B) Review

Return to Contents
**Dental Clinic**

(1) Staff and Students

Director: Takamune Hino
Assistant Professor: Masaru Ohara

(2) Main Research Activities

1. Pathogenesis of the periodontal diseases
2. A study on the drug-resistant bacteria from nosocomial infection

(3) Research Achievements

A) Original Papers (including Case Reports)

1. The report on the oral cavity-related trouble judging from the dental consultation for university students. Takamune Hino, Yuka Tamamoto, Yoriko Iwasaki, Masaru Ohara, Toru Hiyama, Masaharu Yoshihara, Bulletin of General Health Research, volume 33, pages 77-82, 2017

C) Publications

D) Other Publications

E) Presentation at Scientific Meeting


F) Seminar, Workshop, etc.

1. Advanced OSCE for residents: 1 and 8 (Wed)/2/2017

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

(5) Academic Awards, etc.

(6) Patents

1. Utility Model Registration: RN:3182420, Masaru Ohara, Takamune Hino
Dental Medical Information Section

(1) Staff and Students

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

(2) Main Research Activities

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

(3) Research Achievements

A) Original Papers (including Case Reports)


B) Review

None.
C) Publications

None.

D) Other Publications

None.

E) Presentation at Scientific Meeting


2: Tsukuma H et al: Trial Production of Management Model to Improve the Quality of Data Accumulated in Hospital Information System: The 37th Joint Conference on Medical Informatics (Osaka, Japan), 2017.


F) Special lectures in academic meetings

None.

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

1: MEXT KAKENHI Grant-in-aid for Scientific Research(C), No. 15K004380. 550 thousand JPY.

2: MEXT KAKENHI Grant-in-aid for Scientific Research(C), No. 16K004610. 100 thousand JPY.

(5) Academic Awards, etc.
None.

(6) Patents

None.