# OKAYAMA UNIVERSITY HOSPITAL



2022-2023 Hospital Guide



### Philosophy

We offer highly advanced medical care in a caring manner, train and educate excellent medical professionals, and contribute to continuous health promotion in society and the community.

### **Basic Principles**

- We offer an internationally superior level of medical care environment, undertaking state-of-the-art development.
- All staff members act with a strict sense of ethics and respect the dignity of patients.
- We foster rich humanity as medical professionals and cultivate scientific thinking ability.

### Clinical Ethics Policy

Okayama University Hospital provides high-quality medical care with due consideration to the dignity and human rights of those who receive care based not only on treating those who are sick but also prompting and maintaining people's health, recognizing the gravity of the responsibility, and "loving people".

- Respecting patients' human rights and right of self-determination, we achieve a medical environment with a rich sense of humanity. Members of our medical staff strive to gain the trust of patients and practice medicine in accordance with patients' perspectives.
- We implement clinical research on the code of medical ethics for the development of medical care and undertakes the provision and development of highly advanced medical technology. With regard to issues related to patients' beliefs and the dignity of life, we choose a course of treatment after conducting deliberations. In addition, the quality of medical treatment and the validity of medical practice are examined.
- When practicing medicine, we comply with the relevant laws, regulations, and guidelines, and strive further to provide efficient medical care.

#### Contents

Philosophy, Basic Principles,	Initiatives of
Clinical Ethics Policy — 1	Okayama University Hospital – 7
Message — 2	Medicine ——————————
Clinical Department ——— 3	Dentistry — 28
History — 5	Access to Okayama

### For patients, for the development of health and medicine, not for oneself but for society

The philosophy of Okayama University Hospital is "We offer highly advanced medical care in a caring manner, train and educate excellent medical professionals, and contribute to continuous health promotion in society and the community." Our hospital has a long tradition and history of over 150 years, dating back to 1870 when the Major Hospital of the medical school of Okayama Domain was established. We have been providing and shall provide the best medical care to our patients.



The Okayama University Hospital administration and staff have collaborated to provide minimally invasive medicine such as robot-assisted surgery and IVR, and highly advanced medical technology such as organ transplantation, highly advanced surgery, and multidisciplinary cancer care. We are going to refine these central fields further, in addition to immunotherapy and genomic medicine which are expected to develop. In August 2015, we were designated as the Core Hospital for promoting hematopoietic stem cell transplantation of the Chugoku area, and have been striving to promote transplantation medicine in the Chugoku area and conducting many cases of hematopoietic stem cell transplantation in intractable diseases such as leukemia. We have also been certified as the only institution in the Chugoku and Shikoku areas that provides treatment with genetically modified immunocytes (CAR-T cell therapy), presenting state-of-theart medical care to many patients.

Genomic cancer medicine, by which cancer genes are investigated to provide optimal medical care to each patient, has been developing rapidly. Okayama University Hospital has been designated as a "Cancer Genome Medicine Core Hospital" to play the role as leader of genomic cancer medicine not only by providing optimal medical care to each cancer patient but also by leading clinical studies and advanced medicine to promote research and development. Our Center for Comprehensive Genomic Medicine combined with Clinical Cancer Center, BioBank, Department of Clinical Genetics and Genomic Medicine, and so on, work on the development of genomic cancer medicine.

Okayama University Hospital has been designated as a "Core Clinical Research Hospital under the Medical Care Act" to play the central role in internationallevel clinical studies and investigator-initiated clinical trials to promote highquality clinical studies necessary for the development of innovative drugs and medical devices from Japan. In addition, our hospital, which is a "core hospital for translational study support," continues studies that cover basic studies of actual medical care in patients. Okayama University Hospital contributes continuous health improvement in society and local communities through the promotion of industry-academia-government collaborative activities and development of innovative medicine from the interdisciplinary research environment.

Finally, Okayama University Hospital is also a place for educating good medical specialists. In Society 5.0, where all humans and things are connected to share various information and to produce novel and unprecedented values, it is also necessary for medical specialists to respond to changes in the surrounding society. We have been concentrating on human resource development for the promotion of digitalization, with emphasis on data-driven research, artificial intelligence technology, and big data analysis. We educate medical specialists who have "immutability" to remain faithful to the idea of "for patients, for the development of health and medicine, not for oneself but for society", and who also have "fluidity" to respond flexibly to social changes and launch them to the region and to the world.

We the staff of Okayama University Hospital continue in our earnest efforts to meet expectations of our patients and society and communities. We are most grateful for your kind support.

Director, Okayama University Hospital

Yoshinobu Maeda.M.D.

### Clinical Department

#### Clinical Divisions of Medicine

Department of General Medicine

Gastroenterology and Hepatology Department

Department of Hematology and Oncology

Department of Allergy and Respiratory Medicine

Division of Kidney,

Diabetes and Endocrine Diseases

Division of Rheumatic Diseases

Department of Cardiovascular Medicine

Department of Neurology and Strokology

Department of Infectious Diseases

Department of Gastroenterological Surgery

Department of Hepato-Biliary-Pancreatic Surgery

Department of General Thoracic Surgery

Breast and Endocrine Surgery Department

Department of Urology

Cardiovascular Surgery Department

Pediatric Surgery Department

Department of

Pediatric Cardiovascular Surgery

Department of Orthopaedic Surgery

Plastic Surgery Department

Department of Dermatology

Ophthalmology Department

Department of Otorhinolaryngology

Department of Neuropsychiatry

Department of Neurological Surgery

Department of Anesthesiology and Resuscitology

Department of Pediatrics

Department of Pediatric Cardiology

Department of Child Neurology

Pediatric Hematology and Oncology Department

Pediatric Anesthesiology Department

Pediatric Radiology Department

Department of Child Psychosomatic Medecine

Department of Obstetrics and Gynecology

Department of Radiology

Department of Emergency and

Critical Care Medicine

Department of Anatomic Pathology

Palliative and Supportive Care Department

Department of Clinical Genetics and

Genomic Medicine

#### Clinical Divisions of Dentistry

#### Division of Dentistry

- Department of Comprehensive Dentistry
- Department of Operative Dentistry
- Department of Periodontics and Endodontics
- Department of Oral Rehabilitation and Implantology
- Department of Prosthodontics
- Department of Preventive Dentistry
- Department of Oral Diagnosis and Dentomaxillofacial Radiology
- Department of Dental Anesthesiology

#### Division of Oral and Maxillofacial Surgery

- Department of Oral and Maxillofacial Reconstructive Surgery
- Department of Oral and Maxillofacial Surgery

Department of Orthodontics

Department of Pediatric Dentistry

### Department of Pharmacy

### Department of Nursing

### Medical Support

#### Central Clinical Facilities

Safety Management Facility

Division of Medical Safety Management

Division of Infection Control and

Prevention

Division of

Advanced Medical Management

Division of Safety Management of Medical Instruments

Division of Quality Management in

Radiology

Central Clinic

Division of Clinical Laboratory

Division of Radiology

Division of Operation

Intensive Care Unit (ICU)

Cardiac Care Unit

Division of Physical Medicine and

Rehabilitation

Division of Anatomic Pathology

Division of Blood Transfusion

Division of Hemodialysis and Apheresis

Division of Endoscopy

Division of Hospital Dentistry

Clinical Nutrition Division

Advanced Critical Care and

**Emergency Medical Center** 

Perinatal Center

Clinical Cancer Center

Endocrine Center

Perioperative Management Center

Organ Transplant Center

Ultrasound Diagnostics Center

Minimally Invasive Therapy Center

Diabetes Center

Interventional Radiology (IR, IVR in Japan) Center

Gender Center

The Inflammatory Bowel Diseases Center

Locomotive Pain Center

The Center for Special Needs Dentistry

Division of Nuclear Medicine

Division of

Extracorporeal Shock Wave Lithotripsy

Dental Comprehensive Diagnosis Room

(Preliminary Examination Room)

Medical Support Facilities Division of Medical Informatics

Hospital Management

Clinical Engineering Center

Integrated Support Center for

Patients and Self-learning

Supply, Processing and Distribution Center

Dental Laboratory Division

Division of Dental Hygiene

Regional Outreach Office (Dental)

Hospital-based cancer registry division

Center for Diversity and Inclusion

**Education and Research Facility** 

Center for Innovative Clinical Medicine

The Center for Graduate

Medical Education

Center for

Comprehensive Genomic Medicine

Biobank

# History

April 1870 Meiji 3	Okayama Domain Igakukan was established (in Kadota, Okayama City).
June 1870 Meiji 3	A main hospital was opened in Okayama Domain Igakukan (in Kadota, Okayama City).
July 1871 Meiji 4	An infirmary was established attached to Okayama Domain Igakukan (in Nakano-cho, Okayama City).
January 1872 Meiji 5	Okayama Domain Igakukan changed its name to Igakusho.
July 1872 Meiji 5	The main hospital and the infirmary of Okayama Domain Igakukan were merged and relocated; Igakusho (Medical School) was attached (in Nakanocho, Okayama City).
November 1873 Meiji 6	Okayama Prefectural Hospital was established.
September 1880 Meiji 13	Igakusho (Medical School) was renamed Okayama Prefectural Medical School; it became independent from the Hospital.
April 1888 Meiji 21	Okayama Prefectural Medical School was dissolved; The Third Higher Middle School Medical Faculty was established.
July 1891 Meiji 24	Okayama Prefectural Hospital was relocated to the premises of the Third Higher Middle School Medical Faculty (in Uchisange, Okayama City).
September 1894 Meiji 27	The Third Higher Middle School Medical Faculty was renamed The Third Senior High School Medical Faculty.
April 1901 Meiji 34	The Medical Faculty was separated from The Third Senior High School and became independent as Okayama Medical Speciality School.
March 1921 Taisho 10	Okayama Prefectural Hospital was newly constructed at the present location; completion of the building construction was celebrated (in Shikata Mura: present-day Shikata-cho, Okayama City).
April 1921 Taisho 10	Okayama Prefectural Hospital was transferred to the Ministry of Education. It became Okayama Medical Speciality School Affiliated Hospital and started providing treatment at the new hospital.
April 1922 Taisho 11	Okayama Medical College was established. Okayama Medical Speciality School Affiliated Hospital was renamed the Okayama Medical College Affiliated Hospital.
May 1939 Showa 14	Okayama Medical College Temporary Affiliated Medical Speciality was established.
July 1939 Showa 14	Okayama Medical College Misasa Spa Sanatorium was established.

November 1943 Showa 18	The Okayama Medical College Misasa Spa Sanatorium was renamed the Okayama Medical College Radium Research Institute.
May 1949 Showa 24	Okayama Medical College was included in Okayama University. Okayama University Medical School, Okayama University Hospital, Misasa Branch Hospital, Honjima Branch Hospital, and Konko Branch Hospital were established.
April 1957 Showa 32	Konko Branch Hospital was dissolved.
March 1960 Showa 35	Okayama Medical College was dissolved.
September 1963 Showa 38	The Emperor Meiji and Empress made a royal visit to the hospital (three royal visits followed afterward).
April 1965 Showa 40	Medical School Affiliated Hospital Misasa Branch Hospital was established.
October 1979 Showa 54	Dental School was established.
April 1982 Showa 57	The University Hospital of Dentistry was established.
March 2000 Heisei 12	Honjima Branch Hospital was abolished.
April 2002 Heisei 14	Medical School Affiliated Hospital Misasa Branch Hospital was dissolved and Medical School Affiliated Hospital Misasa Medical Center was established.
October 2003 Heisei 15	University Hospital of Medicine and University Hospital of Dentistry was Integrated and University Hospital of Medicine and Dentistry was established.
April 2004 Heisei 16	Okayama University was transformed into Okayama University, National University Corporation.
January 2007 Heisei 19	Hospital name approved according to the Medical Treatment Act was changed to the Okayama University Hospital and the Okayama University Hospital Misasa Medical Center.
April 2009 Heisei 21	Hospital name of organization (Okayama University) was change to the Okayama University Hospital and the Okayama University Hospital Misasa Medical Center.
March 2016 Heisei 28	Okayama University Hospital Misasa Medical Center was abolished.
March 2017 Heisei 29	Okayama University Hospital was accredited as a Core Clinical Research Hospital under the Medical Care Act.
February 2018 Heisei 30	Okayama University Hospital was accredited as a Cancer Genome Medicine Core Hospital.

### Okayama University Hospital started the "Doctor Car" system

We started to operate the "Doctor Car" system using a large ambulance vehicle on April 1, 2022. The doctor car is used for transportation over a wide area by a medical team comprising physicians, nurses, clinical engineers and others, for transportation of patients in serious cases using advanced medical devices such as ECMO. It will also be used as a "DMAT car" to be sent to an area affected by a natural disaster. Two paramedics we have employed since April work with other medical workers and assist medical care on site during transportation of patients.

We endeavor to contribute to the development of emergency medicine in Okayama Prefecture and in neighboring areas, actively spreading the usefulness of the doctor car system.





# Do you know "Nurses for Specified Medical Acts"?

Okayama University Hospital has been providing "training for Specified Medical Acts" since April 2020 upon designation by the Ministry of Health, Labour and Welfare. Five nurses have completed the training program to date, including three who finished the intraoperative anesthetic management package and two who finished the postoperative care management package.

"Nurses for Specified Medical Acts" indicate nurses who have completed training for specified medical acts in a designated training facility, and who perform "specified medical acts" based on autonomous decisions within the comprehensive instructions called "procedure manuals" prepared by physicians or dentists. "Specified Medical Acts" are medical activities conducted as "assistance to medical care" stipulated in the Act on Public Health Nurses, Midwives, and Nurses. They consist of 38 activities including drain removal. "Nurses for Specified Medical Acts" have been working in the operation room, the Intensive Care Unit and the general ward since March 2022.

"Nurses for Specified Medical Acts" have learned medical knowledge and cognitive skills such as clinical reasoning, which are advantageous in that they can judge patients' conditions from the viewpoint of medicine and nursing to provide timely care. Participation of "Nurses for Specified Medical



Acts" in medical teams leads to safer medical care of better quality.

The Department of Nursing, Okayama University Hospital, is conscious of the responsibilities of nurses having expanding roles. It has continued educating and utilizing "Nurses for Specified Medical Acts" in efforts at more advanced and deeper team medicine.

### Late-onset hypogonadism causing fatigue after COVID-19

The most frequent symptom persisting after COVID-19 is "general fatigue." Nevertheless, the proximate cause of the fatigue has remained unknown. The Department of General Medicine specifically examined "late-onset hypogonadism (LOH syndrome/male menopause)" with "fatigue" as the major symptom in the same way as long-COVID. That is, they investigated the latent "LOH syndrome" in male patients who visited our COVID-19 After Care Clinic.

- 1. There are not a few cases of young male patients who meet the criteria of the LOH syndrome.
- 2. Symptoms such as fatigue, anxiety, coughing, and hair loss are notable in cases that correspond to the LOH syndrome.
- 3. Anemia and decreased serum protein might occur in cases that correspond to the LOH syndrome.

These study results indicate the possibility of underlying hypogonadism or LOH syndrome in male patients as a cause of general fatigue after COVID-19. They are very important findings in the elucidation of the unknown pathogenesis and specific treatment of long-COVID.

### **Development of Portable Splash Shield** to protect emergency units from COVID-19

During the COVID-19 pandemic, many medical workers have been working along with the risk of viral infection. It is particularly important for emergency units on the front line of emergency medicine to decrease their risk of exposure to droplets and aerosol from patients. The Department of Emergency and Critical Care Medicine of Okayama University Hospital and HIVIX, a company that processes balloon materials into products, jointly developed the "Portable Splash Shield" virus shield for use in emergency situations.

This lightweight shield, which is air-operated using balloon materials, can be easily assembled in an ambulance vehicle. The top side, covering the head of a patient, is slanted so that the patient can be observed easily. It is

equipped with a port to connect a suction connector. There are openings for maneuvering and manipulation, with curtain sheets on other sides so that the shield can be used with the patient in the supine position or in a semi-sitting position. The shield can be used during, for example, airway maintenance without hindering procedures (Figures 1 and 2).

Protection from droplets from the patient is achieved by covering the patient's head in the shield. It has also been demonstrated that the aerosol particles remaining in the shield can be removed by suction through the suction mechanism on the top side.

This product is expected to be applicable for protection not only from COVID-19 infection, but also from unknown microorganisms.





Figure 2



# **Clinical Divisions** Medicine

# Department of General Medicine



Director. Department of General Medicine

#### Fumio Otsuka

For patients who have multiple illnesses overlapping several departments and who cannot decide the appropriate department to visit, we provide the various medical cares including holistic evaluations and immediate treatments as needed. When we can decide the appropriate department for each patient, we will refer the patient to specialists. On the other hand, when the patients need general diagnosis and treatment, we provide the appropriate and necessary treatments including hospital cares.

We provide outpatient clinical service every morning. In the afternoon, clinical hours are assigned for patients who have made an appointment in advance.

#### Treatment system and policy

Our aim is not only "to cure disease" but also "to treat as a patient". So the staff members work together to provide the suitable medical care and to improve the patient's "quality of life". To choose the optimal treatment policy of each patient, the detailed history and lifestyle is recorded. A physical exam, blood biochemical and urinary tests and other radiologic or endoscopic examinations will be conducted as needed at the initial consultation. The department provides general and comprehensive medical treatment.

# Gastroenterology and Hepatology Department

The Department of Gastroenterology and Hepatology provides diagnoses and treatment of diseases such as inflammation and tumor mainly in liver disease, gastrointestinal disease, and pancreatic-biliary disease. Specialized diagnosis and treatments is performed: 1. endoscopic submucosal dissection for cancers in pharynx, esophagus, stomach, and colorectum, 2. endoscopic sclerotherapy for esophageal varices, 3. endoscopic examination of the entire alimentary tract with double balloon endoscopy and capsule endoscopy, 4. leukocyte apheresis and molecular targeted drugs for ulcerative colitis and Crohn's disease, 5. endoscopic therapy for gallstone and pancreatitis, and stent implantation for biliary tract tumor, 6. systemic chemotherapy for inoperable advanced gastrointestinal cancer, 7. diagnosis and treatment for viral hepatitis, autoimmune liver diseases. and steato-hepatitis, 8. liver transplantation for end-stage liver disease in collaboration with the departments of surgery, and 9. radiofrequency ablation, trans-catheter arterial embolization, radiation, and anticancer treatment with molecular targeted drugs for liver cancer.

# Department of Hematology and Oncology



Director. Department of Hematology and Oncology

#### Yoshinobu Maeda

We provide comprehensive medical service and care for a variety of hematopoietic disorders, from hematological malignancies such as leukemia, myelodysplastic syndromes, malignant lymphoma, and multiple myeloma, to non-malignant diseases, such as aplastic anemia, hemolytic anemia, polycythemia, thrombocytopenic purpura, coagulation disorders. For malignant hematopoietic disease, state-of-the-art treatment is performed particularly, such as the clinical trials of new drugs, new clinical studies, and hematopoietic stem cell transplantation (HSCT).

We perform allogeneic HSCT in one of the largest numbers of cases among national and public university hospitals in Japan (48 cases in 2021). We have 14 beds to perform hematopoietic stem cell transplantation in the Biological Clean Room (BCR). We perform actively as the central institution for HSCT in the Chugoku and Shikoku regions. Moreover, we have been perfoming CAR-T cell therapy for refractory/relapsed acute lymphoblastic leukemia and diffuse large B cell lymphoma patients since the end of 2019 (21 cases in 2021).

In collaboration with the Transfusion Unit, hematopoietic stem cells of patients or healthy donors are harvested from the peripheral blood safely. Bone marrow harvest in the operation room is also performed as required. Our multispecialty team has extensive experience working with patients who need to treat with HSCT for conquering blood diseases.

# Department of Allergy and Respiratory Medicine



Department of Allergy and Respiratory Medicine

### Katsuyuki Kiura

We provide accurate diagnosis and precision medicine for malignant tumors including those related to lung cancer, bronchial asthma, chronic obstructive pulmonary disease (COPD), pulmonary fibrosis, lung disease related to collagen vascular disease, granulomatous lung disease, diffuse panbronchiolitis, and chronic respiratory failure. We are specialized most in the treatment of lung cancer among thoracic neoplastic diseases, reporting excellent treatment outcomes by global standards. We also perform cutting-edge clinical trials such as multidrug therapy using the anticancer agents, trimodality treatment by the combination of chemotherapy with surgery or chest irradiation, novel molecular targeted drugs, and immunotherapies. In addition, chemotherapy is performed for widely various tumor systems such as germ cell tumor, soft tissue tumor, gastro-intestinal cancer, as well as head and neck tumors. For respiratory and allergic diseases, therapeutic strategy is based on the results from blood test, respiratory function test, high-resolution computed tomography or bronchoscopy. Severe bronchial asthma are treated effectively by new antibody drugs.

### Division of Kidney, **Diabetes and Endocrine Diseases**



Director. Division of Kidney, Diabetes and Endocrine Diseases Jun Wada

The Division of Kidney, Diabetes and Endocrine Diseases provide specialized care mainly for kidney diseases, diabetes, dyslipidemia, obesity, endocrine diseases and hypertension as well as prevention and treatment for chronic kidney diseases and lifestyle-related diseases. Outpatient special care of us is available in the morning and afternoon from Monday through Friday. The treatment policy for inpatients is discussed and determined in the case conference and the professor's grand round, which are held every week. Each case is discussed in detail by the specialized group of respective fields in a conference for the determination of definitive diagnosis and treatment policy. Among metabolic diseases, comprehensive care is provided for diabetes, metabolic syndrome and dyslipidemia, which have been increasing considerably as common diseases. We endeavor to conduct accurate diagnoses and stateof-the-art treatment for diverse kidney diseases such as glomerulonephritis, nephrotic syndrome, and renal failure, introduction of hemodialysis and peritoneal dialysis. For endocrine diseases, diagnosis is made comprehensively by endocrine tests, diagnostic imaging, genetic tests, and other methods. The intensive care is provided in collaboration with surgeons through collaboration with the Endocrine Center.

### **Division of Rheumatic Diseases**



Division of Rheumatic Diseases Jun Wada

Division of Rheumatic Diseases provides treatment mainly for rheumatic diseases including rheumatoid arthritis and other rheumatic diseases such as systemic lupus erythematosus. Outpatient special care of us is available in the morning and afternoon from Monday through Friday. The treatment policy for inpatients is discussed and determined in the case conference and the professor's grand round, which are held every week. Moreover, in the rheumatic disease group, each case is discussed in detail in a conference for the determination of definitive diagnosis and treatment policy. As for rheumatic diseases, about 1000 patients with rheumatoid arthritis, systemic lupus erythematosus, and vasculitis, etc. are visiting us for treatment. We have a history of practice ahead of other medical institutions and plenty of experience in immunosuppressive therapy, biological products, plasmapheresis and immune adsorption therapy for patients with diverse rheumatic diseases that are severe, refractory and with complications in addition to typical cases. Moreover, we currently provide treatment for about 40 various kinds of rheumatic diseases, and also endeavor for early detection and early treatment using that experience.

### Department of Cardiovascular Medicine



Department of Cardiovascular Medicine Hiroshi Ito

The Department of Cardiovascular Medicine provides diagnosis and care for patients with diseases related to the heart, blood vessels (large and peripheral vessels), and high blood pressure. It specializes in intractable diseases such as arrhythmia, pulmonary hypertension, and ischemic heart diseases.

#### Treatment system

Outpatient clinic service: 3 - 6 physicians provide outpatient care each morning and afternoon.

Hospital admission service: 26 cardiovascular specialist and specialist trainees provide inpatient care on a round-the-clock basis.

#### Specialties

Emphases are placed not only on ischemic heart diseases, but also on various types of irregular heartbeat, pulmonary hypertension, severe heart failure, sleep apnea, hypertension, arteriosclerosis obliterans, and general cardiovascular diseases.

# Department of Neurology and Strokology

The Department of Neurology and Strokology deals with stroke and dementia (Alzheimer disease) developing from lifestyle-related diseases or metabolic syndrome and increasing numbers of patients in Japan, headache, neurodegenerative diseases (Parkinson's disease, amyotrophic lateral sclerosis, spinocerebellar degenerative disease, etc.), neuroimmune disease (multiple sclerosis, myasthenia gravis, CIDP, etc.), rehabilitation medicine and blepharospasm and facial spasm treated by botulinus. For outpatients, specialists certified by the Japanese Society of Neurology and the Japan Stroke Society play a central role in providing medical treatment in the six specialized outpatient divisions. For inpatients, we hold conferences every week under the guidance of professor and specialists and provide the best internationally advanced treatments. We organize the Sanyo Neurological Intractable Diseases Network and Sanyo Stroke Conference to provide medical support, life support and work support for patients suffering from neurological intractable diseases or stroke through conferences and patient meetings. Our department plays a role of the core university hospital in Chugoku and Shikoku. Many patients, including those who are seeking a second opinion, have been referred to our department by numerous medical institutes throughout Japan.

# **Department of Infectious Diseases**



Department of Infectious Diseases

### Nobuchika Kusano

The Department of Infectious Diseases targets all infections caused by microorganisms such as bacteria and fungi, providing diagnosis and treatment for infectious diseases in various organs.

These include septicemia, respiratory tract infections, urinary tract infections, gastrointestinal infections, sexually transmitted disease (STD) and systemic viral infections.

We diagnose various infectious diseases and provide appropriate antimicrobial therapy to prevent bacteria and fungi from developing resistance. We also diagnose and treat unidentified fever.

Our department provides medical care as an HIV center hospital in Okayama Prefecture.

# Department of Gastroenterological Surgery



Department of Gastroenterological Surgery

### Toshiyoshi Fujiwara

The Department of Gastroenterological Surgery provides comprehensive surgical consultation and care in many specialties including esophageal surgery, gastric surgery, colon and rectal surgery, and so on. Your care will be provided in a clinic that unites several specialties to provide the best possible treatment plan under the motto "safe and reassuring surgery". Esophageal Surgery specialists treat not only esophageal malignancy but benign diseases such as gastroesophageal reflux disease. Gastric Surgery specialists treat malignancies of gastric cancer and gastrointestinal stromal tumor (GIST) and perform bariatric surgery for severe obesity patients. Colorectal Surgery specialists treat colorectal malignancy and inflammatory bowel diseases such as ulcerative colitis and Crohn's disease. Minimally invasive laparo- or thoracoscopic surgery is actively performed for functional conservation and early recovery after surgery. Chemotherapy is an available option, when indicated. Every treatment option is decided in the department conference. Preoperative surveillance and preoperative treatment of patients with disease such as severe diabetes or cardiovascular disease are, if needed, performed in cooperation with other departments including the Department of Anesthesiology and Resuscitology.

# Department of Hepato-Biliary-Pancreatic Surgery

Takahito Yagi



Director. Department of Hepato-Biliary-Pancreatic Surgery

The Department of Hepato-Biliary-Pancreatic Surgery is led by Prof. Takahito Yagi and consists of four staff surgeons including three board certified expert surgeons (Hepatobiliary- Pancreatic field). We perform around 250 surgeries each year, including around 100 hepatectomies, 70 pancreatectomies, and 25 liver transplantations. We have performed more than 450 liver transplantations and the survival after transplantation is better than the data from national registry. Moreover, we succeeded simultaneous liver and kidney transplantation for the first time in Japan and, therefore, we are recognized as the leader in this field.

Our treatment policy is that the most suitable for each patient is selected in close collaboration with medical oncologists, transplant hepatologists, radiologists, and anesthesiologists. We conduct aggressive surgical treatment and often apply transplant technologies to the surgical procedures of malignant disease.

# Department of **General Thoracic Surgery**



Department of General Thoracic Surgery Shinichi Toyooka

#### Treatment system and treatment policy

We provide surgical treatment for patients with diseases of the lung, mediastinum, chest wall and trachea. In order to provide optimal multidisciplinary treatment for each patient, we hold a conference with the Department of Respiratory Medicine and the Department of Radiology, and discuss the applicability of surgery, chemotherapy and radiotherapy. Our staff members include two professors, one associate professor, five board certified thoracic/general surgeons and surgical residents.

#### Specialties

Since the first case in Japan in 1998, we have performed 204 lung transplantation (from living/brain-dead donor) as of the end of 2020. The outcomes have also been excellent and at the top level world-wide, with the 5-year survival rate of 75%. In addition, we provide various treatments for malignant lung tumors from extensive operations using techniques developed in lung transplantation to minimally invasive surgical procedures such as complete VATS (video-assisted thoracic surgery) and RATS (robot-assisted thoracic surgery). Several clinical trials and translational researches are also on going to develop new treatment strategies for thoracic malignancies.

### **Breast and Endocrine Surgery** Department



Breast and Endocrine Surgery Department

### Tadahiko Shien

This specialized department targets breast cancer, thyroid gland, and parathyroid diseases, conducting tests and providing treatments (including surgery and pharmacological therapies) in cooperation with other departments.

#### Treatment policy

Breast cancers: in terms of surgical treatments, we choose between mastectomy and breast-conserving surgery according to the degree of disease progression and a patient's wishes. We can offer different types of breast reconstructive surgery in cooperation with the Department of Plastic Surgery. Regarding pharmacological therapy, we provide evidence-based standard treatments.

Thyroid and parathyroid diseases: in addition to standard surgeries, we can also offer small incisions for cosmetic reasons depending on the circumstances. (Highly advanced/specialized medical treatment)

- Techniques performed as medical treatments at a patient's own expense
- Radiofrequency ablation (RFA) for early stage breast cancer (Advanced medical care B)
- Genetic diagnosis
- Fertility conservation therapy for patients undergoing drug therapy for breast cancer



### Department of Urology



Director. Department of Urology Motoo Araki

The Department of Urology at Okayama University Hospital is recognized worldwide for excellence in patient care, teaching and research. Urology is the medical and surgical specialty that focuses on the urinary tracts of males and females, and on the reproductive system of males. The organs covered by urology include the kidneys, adrenal glands, ureters, urinary bladder, urethra, and the male reproductive organs (testes, epididymis, vas deferens, seminal vesicles, prostate and penis).

Treatment system Outpatient clinic days: Mon- Wed, and Fri (AM)

Treatment policy We treat urologic problems with compassion and expertise. Expertise Top-level specialists provide care for the entire field of urology, including urinary tract and genital tumors, urinary tract infectious diseases, urinary tract stones, voiding problems, male sexual dysfunction, female urological diseases, gender identity disorder, Neurourology, Endourology, Laparoscopy, Robotic surgery and kidney transplant.

Advanced treatments / Specialized treatments

Laparoscopic surgery including robotic surgery, Endourology, kidney transplant.

### Cardiovascular Surgery Department



Director. Cardiovascular Surgery Department Shingo Kasahara

Our goal is to achieve unsurpassed patient outcome. Since Professor Kasahara, who is a current Director, started to lead the team, the department became one of the leading Cardiovascular Surgery units in Japan. We provide the best treatment in the field of pediatric cardiac surgery, adult cardiac surgery, and vascular surgery, accepting the patient not only the local area but also other part of Japan and even other countries.

Facility 18 intensive care beds, including 8 pediatric beds, 8 post intensive care beds for pediatric patient, 2 operating room and 1 hybrid operating room. Treatment Complex pediatric cardiac surgery - Modification of Norwood procedure for hypoplastic left heart syndrome introduced by Professor Sano, is now well known as "Sano procedure" and widely applied in the many centers in the world. Catheter treatment of atrial septal defect (Dr. Teiji Akagi), for the aorta, Surgery for ischemic heart disease, Surgery for valvular disease, Ventricular assist device, Vascular Surgery, Endovascular treatment including all cardiovascular area.

Research Regenerative therapy for end-stage heart failure in pediatric patients (Professor Oh, Clinical trial in progress), Vascular surgery for new artificial graft.

### **Pediatric Surgery Department**



Pediatric Surgery Department

#### Takuo Noda

The Pediatric Surgery Department provides medical therapy for children, for whom we diagnose and treat diseases requiring surgery in the digestive systems (stomach, bowels, liver, and others), respiratory systems (lungs and windpipe), genitourinary systems (kidney, bladder and others), etc.

Two surgeons certified as proper pediatric surgeons from the Japanese Society of Pediatric Surgeons are in charge of the department.

We provide medical and surgical care with the motto, "practice of surgical treatment not to handicap any child." Thinking that to diminish the effect of childhood surgery to the greatest extent possible is greatly meaningful for children expected to live for a long time, we always keep it in mind. We give detailed information about surgery's necessity and postoperative effects. Additionally, we follow up our patients for a longer time, even after they reach adulthood, depending on the disease.

We adopt less-invasive operative procedures for anorectal anomaly (anal atresia) and Hirschsprung's disease to enable our patients to have good bowel function after operation. Additionally, we actively perform endoscopic operations on small children. Microsurgery techniques are introduced to surgery for newborn and premature babies to respond to fine operation.

# Department of Pediatric Cardiovascular Surgery



Director. Department of Pediatric Cardiovascular Surgery

### Shingo Kasahara

The Department of Pediatric Cardiovascular Surgery was established to provide the best surgery for patients born with congenital heart disease. The Department of Pediatric Cardiovascular Surgery is one of the largest institutions in Japan that performs 350 heart surgeries annually, accepting patients not only from Okayama Prefecture, but also from all over Japan and overseas.

Our policy is to provide the comprehensive heart surgery for patients with congenital heart disease. Safety is our priority and surgical treatment is provided according to each patient's life style. We are convinced it is of prime importance that a tailor-made care is provided, as congenital heart disease can be a lifetime issue. We are accepting the patients 24 hours a day, 7days a week, no matter how serious the condition will be, as the sole pediatric cardiac center in the area.

We have a unique experience of comprehensive heart surgery, especially for neonates and patients requiring a complex surgery. In particular, we have so far treated over 150 cases of stage I palliation for hypoplastic left heart syndrome by means of the Norwood-Sano procedure, achieving an excellent result with an operative survival of 92% (zero mortality in the last 3-years). In addition, mortality including neonatal surgery and complex cardiac surgery is less than 1%. Minimally invasive surgery is performed for some simple surgeries. We also provide surgical and medical treatments for severe heart failure, such as the implantation of pediatric ventricular assist device and regenerative medicine to the patients with single ventricle. Life support with an extracorporeal membrane oxygenation treats not only the heart but also other organs, namely lungs, liver, and kidneys.

### Department of Orthopaedic Surgery



Department of Orthopaedic Surgery

#### Toshifumi Ozaki

Orthopaedic surgery covers the diseases and injury of cartilages, bones, muscles, ligaments, and nerves. The Department of Orthopaedic Surgery is in charge of elucidation of morbidity, development of therapies, and medical examination in these fields. The Department of Orthopaedic Surgery consists of many groups: bone and soft tissue tumors, joint surgery (hip joint, knee, upper limbs, and rheumatics), spinal surgery, pediatric orthopaedic surgery, sport orthopaedic surgery, upper limb surgery, rehabilitation, and trauma. Medical treatment are conducted by medical specialists in the respective fields. The Department of Orthopaedic Surgery offers broad and up-to-date therapies over the breadth of orthopaedic surgery fields. Lim-sparing surgery of bone and soft tissue malignant tumors (including artificial joints), artificial joint for hip, knees, and elbows (including minimally invasive surgery), spinal surgery (including minimally invasive surgery), surgery to treat pediatric orthopaedic diseases, anterior cruciate ligament reconstruction and meniscus surgery using arthroscopy, functional reconstructive surgery of hands, operations to treat upper limb sport disorders, fracture surgery (including surgery of pelvic ring fracture and acetabulum fracture and minimally invasive surgery), and infective pseudarthrosis surgery.

### **Plastic Surgery Department**



Plastic Surgery Department Yoshihiro Kimata

Our goal is to restore the functions and to improve the quality of life (QOL) of patients with the high-quality care that meets their individual needs.

Our staffs are well experienced in microsurgical procedures which is cultivated, at the beginning, in a sound training system. Using this technique, we provide our patients with a variety of reconstructive surgery including head and neck reconstruction, breast reconstruction, trunk and limb reconstruction following both cancer resection and traumatic injury.

Multidisciplinary treatment of lymphedema consisting of compression therapy, manual lymph drainages and surgical procedure (i.e. lymphaticovenous anastomosis, vascularized lymph node transplant, liposuction) is also one of our specialties.

We perform gender reassignment surgeries for gender identity disorder and genital reconstruction for patients who need it due to congenital conditions, trauma and cancer resection in cooperation with the departments of urology, gynecology, and psychiatry.

Craniofacial reconstruction, cleft lip and palate repair, blepharoptosis repair, treatment of vascular malformation and other plastic and reconstructive procedures are also provided.

### Department of Dermatology



Department of Dermatology Shin Morizane

We take care of all skin diseases including and troubles as dermatologist at the best medical institution. We will do our best to provide the most appropriate medical care for all patients. The dermatological diagnosis is performed by inspection and palpation, and blood tests, dermoscopy, skin echo test, skin biopsy, allergy test, genetic diagnosis, etc. Final diagnosis and treatment are discussed and reassessed at the conference. In addition to topical and oral treatment, chemotherapy, phototherapy, and surgical therapy are given depending on the disease. We actively accept inpatient treatment, and we value cooperation with local hospitals and clinics.

We perform sentinel lymph node biopsy for melanoma. In addition, we research about a COL1A1-PDGFB gene fusion of dermatofibrosarcoma protuberans (DFSP), Epstein-Barr virus-related genes of hydroa vacciniforme and cutaneous lymphoma, and epidermal serine protease activities of atopic dermatitis patients.

# Ophthalmology Department



Director. Ophthalmology Department Yuki Morizane

The Department of Ophthalmology strives to improve vision quality by the continual introduction of novel treatment technologies. The outpatient clinic provides care in specialized therapeutic areas including macula, vitreoretinal disease, diabetes, ocular inflammation (uveitis), glaucoma, corneal disease, strabismus, amblyopia, neuro-ophthalmology, cataracts, and vision rehabilitation. The number of surgeries in the fiscal year of 2017 was 1,791, which topped the rankings kept at this hospital, those operations were mainly accounted for by surgeries of vitreoretinal disease, cataract, glaucoma and strabismus. Laser therapy including photodynamic therapy to age-related macular degeneration, anti-angiogenic agent intravitreal injection, and surgical therapy for retinal detachment, diabetic retinopathy, macular hole, and macular membrane are provided. Although medical treatments for glaucoma or uveitis are primarily provided, surgical procedures are also conducted. Technologies covered by health insurance. Highly advanced/special medical treatments of the following are provided. Submacular surgery, corneal transplant operation, ocular muscle transposition procedure, technologies performed in clinical studies, new treatment for age-related macular degeneration, new treatment for macular diseases, gonioscopy by anterior eye optical coherence tomography.

### Department of Otorhinolaryngology



Department of Otorhinolaryngology

#### Mizuo Ando

The Department of Otorhinolaryngology provides diagnoses and treatments for disorders of the ear, nose, throat, and neck. For patients of all ages, from newborns to elderly people, we provides medical and surgical treatment and rehabilitation.

Ear: In cooperation with the child development support center, Okayama Saya Gakuen, we diagnose hearing loss in infants and provide early auditory intervention with hearing aids, cochlear implants, and other auditory prostheses to help hearing-impaired children acquire auditory language.

Nose: We perform endoscopic sinus surgery with navigation to eliminate inflammation and restore olfactory function without causing surgical complications.

Head and neck: As a division of the Head and Neck Cancer Center of Okayama University Hospital, which is composed of several highly specialized departments, we provide the highest level of medical care that strives to preserve functions.

### Department of Neuropsychiatry

We treat patients with various psychiatric disorders caused by brain dysfunction or psychosocial stressors. The most important goal of our clinical practice is to improve patients' and their families' quality of life through realistic and rational approach for diagnosis and treatment. We also contribute to clarify the mechanisms underlying neuropsychiatric disorders using updated technology of neuroimaging, neurophysiology, biochemistry, neuroimmunology and genetics. The ward have 28 beds including 22 private rooms, a half of which are in the open ward the others are in the closed ward.

#### Treatment Practice

Four to 5 treatment teams are working to determine optimum medical care for each patient in the psychiatric ward. Mental illness comes from biological, psychological or environmental background. We always design treatment strategy for every patient with this in mind. Our practice are specialized in mood disorders such as depression and mania, schizophrenia, dementia, epilepsy, autoimmune psychotic disorders, gender incongruence and eating disorders. If necessary, we collaborate with specialists from other departments to provide with best treatment for patients who suffer from both psychiatric and physical illness at the same time. The Liaisonconsultation psychiatry team is also very active to treat delirium, functional psychosis, psychological change related to the physical disorders in non-psychiatry wards in the hospital.

### Department of Neurological Surgery



Department of Neurological Surgery

#### Isao Date

Neurological surgery is a medical field in which surgical treatment is performed for disease in the brain, spinal cord, and peripheral nervous system.

Treatment policy Surgical operations in the field of neurosurgery include emergency operations performed for stroke and head injury and for the resection of life-threatening brain tumors. Also included are those intended for the prevention of recurrence of stroke performed in the chronic phase as well as functional surgery that does not directly affect vital prognosis such as operations for facial spasms. We provide the most suitable procedures selected from various highly advanced treatment methods available only at university hospitals.

Expertise Surgical treatment, chemotherapy, and radiotherapy for brain tumors, clipping of cerebral aneurysms, cerebral aneurysm coil embolization, carotid artery stenting, revascularization in moyamoya disease, deep brain stimulation for involuntary movement in Parkinson disease and essential tremor, surgery for refractory epilepsy (selective amygdalohippocampectomy, temporal lobectomy, and callosotomy), spinal cord stimulation for intractable pain, microvascular decompression for facial spasm and trigeminal neuralgia, neuroendoscopic surgery for hydrocephalus and pituitary adenoma, microsurgery for spine and spinal cord diseases, and cranioplasty for craniosynostosis.

# Department of Anesthesiology and Resuscitology



Director. Department of Anesthesiology and Resuscitology

#### Hiroshi Morimatsu

Outpatient services of the Department of Anesthesiology and Resuscitology are divided into two prominent types:

- 1 Outpatient service to evaluate a patient's physical state before surgery for safe anesthesia and surgery (Pre Anesthesia Clinic)
- 2 Outpatient service to treat pain (Pain Center)

#### (Treatment policy)

- 1 Pre Anesthesia Clinic is closely related to the PERIO (Perioperative Management Center). One to two weeks before surgery, all patients would have an interview with a staff anesthesiologist.
- 2 Pain clinic: At the first consultation, we take sufficient amounts of time to ask a patient about suffering aside from pain. Furthermore, for making a diagnosis we perform blood test, X-ray, CT, and MRI as needed. Our therapeutic approaches include nerve block therapy, pharmacological therapy, and rehabilitation therapy, among which we individualize the treatment policy for each patient. Additionally, we examine pain comprehensively in close cooperation with each department.

# **Department of Pediatrics** Department of Pediatric Cardiology



Department of Pediatrics / Department of Pediatric Cardiology Hirokazu Tsukahara

The Department of Pediatrics and Pediatric Cardiology cover all fields of diseases and disorders in 0-to-20-year-old infants, children, and adolescents. We provide highly advanced medical treatment safely for pediatric patients. Specifically, The Department of Pediatric Cardiology makes diagnoses and provides treatments mainly for patients with congenital heart diseases.

A total of about 30 pediatricians (medical staffs and residents) work together on specialized treatments in the following fields: severe infectious diseases, congenital heart diseases, blood and malignant tumors, connective tissue diseases, allergic diseases, kidney diseases, endocrine and metabolic diseases, neonatal and infantile disorders, psychosomatic disorders, and so forth.

#### Treatment policy

We offer the latest and most advanced pediatric health care safely. We make every effort to inform patients and their families of what care we are providing and have them understand it to their satisfaction. Our motto in providing treatments is to offer "most helpful and reliable pediatric health care."

# Department of Child Neurology



Director. Department of Child Neurology Katsuhiro Kobayashi

Child neurology, or pediatric neurology, treats various pediatric neurological diseases and disorders. Hospitals with a department specialized in child neurology remain few in number in Japan, unlike other developed countries. Therefore, we have accepted referrals from various places in addition to the Chugoku and Shikoku regions.

We have continued to achieve prominent results in the treatment of epilepsy, particularly refractory epilepsy. In addition to common electroencephalography (EEG), simultaneous video-EEG recording of seizures and special analysis of digital EEG data are conducted for refractory epilepsy. Developmental/ behavioral, neuromuscular, and metabolic disorders are also important fields. We conduct various neuropsychological tests to evaluate the brain functions in developmental disorders. Refractory epilepsy is also treated surgically in collaboration with the Department of Neurological Surgery.

Because treatment is performed for children with various disorders, we treat not only the disease itself but also endeavor to resolve or alleviate aspects of problems of patients and their families in the course of development in collaboration with communities and schools, and with primary care physicians who issue referrals.

# Pediatric Hematology and **Oncology Department**



Pediatric Hematology and Oncology Department

#### Hirokazu Tsukahara

The department is a main section of Medical Center for Children in Okayama University Hospital, which offers highly advanced medical treatments safely. Emphasizing inter-departmental and interprofessional team medicine, we provide treatments for hematological disorders such as aplastic anemia and malignant disease such as leukemia, lymphoma, and solid tumors. Additionally, we have performed more than 200 cases of hematopoietic transplantation as a certified department for unrelated hematopoietic transplantation. We are engaged in several clinical studies in cooperation with many institutions across the country; we are also doing experimental researches to elucidate the pathophysiology of hematological disorders and tumors. Our staff members endeavor to our best to treat seriously sick children and to have their parents spend peaceful days.

#### Treatment policy

We offer state-of-the-art and advanced pediatric health care safely. We make efforts to inform patients and their families of what we are providing and to have them understand it sufficiently. Our motto is to offer "trusted pediatric health care" in support of a good relationship between medical providers and patients.

### **Pediatric Anesthesiology Department**



Director. Pediatric Anesthesiology Department

Tatsuo Iwasaki

This department is charge of anesthetic and perioperative management in the Pediatric Medical Center (PMC) established as a "last defense" in pediatric medicine at Okayama University Hospital. It has worked with many anesthetic cases, including high-risk cardiac anesthesia, as conducted at children hospitals. It has had an increasing number of opportunities to provide state-of-the-art medical care. We try to meet the needs as a part of the "last defense" and provides safe and patient-friendly anesthetic care. The anesthesiologist, sufficiently trained at pediatric specialized hospitals in Japan and overseas, is in charge of sedation, analgesia, anesthesia, and perioperative management, in cooperation with physicians and nurses in the departments of pediatric surgery and medicine and other surgical specialties. Using state-of-the-art knowledge and technology to perform anesthesia and perioperative management, this department makes a safe, secure, and patient-friendly offer of prolonged sedation or sufficient analgesia necessary for examination, and anesthesia necessary for surgeries conducted in the PMC. Additionally, we have many experiences of intensive cares for severe pediatric patients including postoperative management, showing good performance in cooperation with other specialties.

### **Pediatric Radiology Department**



Pediatric Radiology Department Yusuke Matsui

Department of Pediatric Radiology is the part of "Medical Center for Children" of Okayama University Hospital, established as a core center in the Chugoku-Shikoku region to provide highly advanced pediatric medical health and care. Our department is in charge of diagnostic imaging, interventional radiology and radiation therapy specialized for children. Pediatric radiology is a special territory among radiology fields because children require unique inspection and image interpretation methods that differ from those for adult patients. Okayama University Hospital performs CT, MRI and nuclear medicine examinations of over 1,000 children per year, our department takes charge of almost all examinations. In particular, the number of CT examinations for congenital heart diseases are eminence in Japan, we provide high quality CT images with low radiation exposure by using high-end CT efficiently. Additionally, we provide interventional radiology and radiation therapy for pediatric patients. Interventional radiologists who are familiar with pediatric diseases provide sclerotherapy for vascular malformation and radiofrequency ablation for osteoid osteoma. Radiation oncologists provide high precise radiation therapy for pediatric malignant tumors with using high-end radiation therapy and proton beam therapy systems.

# Department of Child Psychosomatic Medicine



Department of Child Psychosomatic Medicine Ayumi Okada

"Psychosomatic disease," as defined by the Japanese Society of Psychosomatic Medicine, is not a mental disease but a state of a physical disease in which psychosocial stresses have strong effects on a person. During the course of their physical and mental development, children are susceptible to psychosocial stress, by which they might develop different physical symptoms. In addition, difficulties and troubles in their daily life because of their physical diseases might cause them mental symptoms such as anxiety and depression or behavioral problems such as non-attendance at school. In this department, pediatricians and psychologists work together to provide medical care. We make efforts to treat children in cooperation with their families, schools, and people around them, by understanding them comprehensively from physical, psychological, and social aspects based on "psychosomatic medicine (Bio-Psycho-Social model)." We will do our best for the smiles of parents and children.

# Department of Obstetrics and Gynecology



Director. Department of Obstetrics and Gynecology

#### Hisashi Masuyama

The Department of Obstetrics and Gynecology comprehensively deals with women's total healthcare. We provide appropriate medical care from puberty, through pregnancy and delivery, to after menopause, including diagnoses and treatments of female genital tumors.

#### Treatment policy

We choose an evidence-based treatment policy by satisfactory discussion in a team conference and then conduct joint meetings among related departments. On the patient's behalf, we provide highly advanced, safe, and effective medical care.

Using fetal ultrasound and MRI for more precise antenatal testing, we collaborate with related departments for fetal control and manage pregnancy complications and abnormal pregnancy. For many cases of female genital tumors, we combine surgery, chemotherapy, and radiation therapy to provide multidisciplinary treatments and to gain good treatment results. Additionally, we offer specialized outpatient clinic services for recurrent pregnancy loss and gender identity disorders, actively tackling related problems.

### Department of Radiology



Director. Department of Radiology

#### Takao Hiraki

Department of Radiology specializes in to make diagnosis using various diagnostic imaging tools including radiography, CT, MRI, and nuclear medicine. Approximately 30 radiologists provide various medical services such as diagnostic radiology, RT (radiation therapy) and IR (Interventional radiology: less-invasive examination and treatment). Outpatient services of RT and IR are performed every weekday.

Specialties We specialized in imaging-guided tumor ablation including lung, liver and renal cancer, and bone tumor. Stereotactic body radiotherapy (SBRT) is also one of the treatment choice that gives radiotherapy from many directions and focused on the tumor precisely. High dose irradiation in the short term is the characteristic point of this therapy.

(Highly advanced and specialized treatments) Stereotactic body radiation therapy to the brain, lungs, and liver / Intensity modulated radiotherapy for prostate cancer / High-volume radioisotope internal therapy to metastatic thyroid cancer / Cryotherapy to malignant renal tumors / Radiofrequency ablation to chest malignancy / Sclerotherapy to vascular malformation / Radiofrequency ablation to osteoid osteoma.

### Department of Emergency and Critical Care Medicine



Department of Emergency and Critical Care Medicine

#### Atsunori Nakao

Our department treats diverse patients in critical condition with acute illness, poisoning, or severe burn / trauma.

#### (Treatment system)

Physicians of the Department of Emergency and Critical Care Medicine are qualified as medical specialists in more than one licensed practice including emergency medicine. We provide the highest level of emergency medical services and critical care in the Chugoku and Shikoku districts. We also maintain the highest level of critical care medical service by systemic care approach.

#### Treatment policy

We ignite all the modalities available for saving the critically ill patients. All physicians, particularly attending doctors and primary doctors, are responsible for the treatment and resuscitation of the emergency patients.

#### Emergency medical care education

Our department administers a regional medical course and provides on-the-job training of emergency medicine for medical students and resident physicians. Our department also provides educational sessions of cardiopulmonary resuscitation for medical students, resident physicians, resident dentists and nursing staffs of all wards.

### Department of Anatomic Pathology



Director. Department of Anatomic Pathology

### Hiroyuki Yanai

Department of Anatomic Pathology provides clinician and patients with histopathological and cytopathological diagnosis. We also perform intraoperative consultation and autopsy. Specimens obtained at surgery or biopsy in this hospital are processed and diagnosis is made. Specimens from primary institutes are reviewed and diagnoses are confirmed before treatment in this hospital. 3 board -certified pathologists and 10 medical technologists (8 of them are also certified cytotechnologists) work in this department. Pathologists of graduate school also join histopathological diagnosis and autopsy.

Histological diagnosis includes immunohistochemical study and it includes hormone receptors and Her2 status of breast cancer, and ALK protein expression in lung cancer.

Cytological diagnosis is primarily performed by cytotechnologists and suspicious and positive cases are reviewed by pathologists. For some cases, cytotechnologists attend cell sampling to improve adequacy of specimen.

Intraoperative consultation is rapid-diagnosis during operation to determine surgical procedure.

Autopsy is performed for patients who died of diseases to examine status of disease and effect of treatment.

# Department of Palliative and Supportive Care



Department of Palliative and Supportive Care

### Masahiro Tabata

It is extremely stressful for patients to receive treatment for incurable or serious disease. Many patients have not only physical, but also psychosocial and spiritual sufferings. We provide supports for these patients who have such various type of sufferings, and relieve these in collaboration of the multidisciplinary team.

Please bring the referral for your primary physician with you. We conduct your support with your physician. We are collaborated with the team's physicians (psychiatry, radiology, dentistry, anesthesiologists, etc.) and other medical stuffs (nurses, pharmacists, social workers, nutritionists, physical and occupational therapists, etc.), and take various ways (including medication, methods of care, radiation nerve block, counseling, and so on) to ease your suffering. We help you and your families to live better lives and receive better treatment.

### Department of Clinical Genetics and Genomic Medicine



Director. Department of Clinical Genetics and Genomic Medicine

#### Akira Hirasawa

The Department of Clinical Genetics and Genomic Medicine comprises the "Clinical Genomics" and the "Cancer Precision Medicine"

The "Clinical Genomics" offers genetic counseling, which is defined as the process of helping people understand and adapt to the medical, psychological, and familial implications of genetic contributions to disease (J Genet Couns. 2006 Apr;15(2):77-

The "Cancer Precision Medicine" investigates genomic alteration of cancer cells, which may lead to better diagnoses and treatment strategies that are tailored to patients' tumors and recommend optimal treatment to their doctors.

Our department provides patients and their families with reliable genomic medicine, in collaboration with referring medical institutes, as well as other departments of Okayama University Hospital.

Many people have strong hopes and expectations for genomic-based medicine. Then we offer comprehensive care including explanations before and after genetic and genomic testing and treatment in addition to care for anxiety resulting from various reasons, so that our patients and their families can have safe and reliable genomic medicine.

Our staff members strive to establish and maintain mutual trust with our patients and their families.



# **Clinical Divisions** Dentistry

# Department of Comprehensive Dentistry

The Department of Comprehensive Dentistry provides dental treatments including preventive dental procedures, conservative procedures, prosthetic procedures, and oral surgical procedure, dealing with one oral case as one unit generally. A team of several dentists with specialties, pre-graduate interns, and residents provides dental therapy.

The plan of treatment of each patient is discussed by a primary dentist plus several dentists from each specialization, to provide evidence-based dental therapy. The treatment policy is not only to target disorders in stomatognathic systems, but also to provide widely various holistic treatments, keeping communication with patients in mind. Furthermore, we hope to contribute to systemic health as well as oral health through post-treatment maintenance and regular checks.

This Clinic enables a primary dentist to provide all treatments in cooperation with different specialists and thereby save the patient the trouble of changing departments for different procedures. In other words, our clinic can provide general treatment for all problems related to the mouth as a unit. Additionally, in cooperation with the specialized departments, it can treat problems that are judged to require advanced treatments.

### Department of Operative Dentistry



Department of Operative Dentistry

### Masahiro Yoshiyama

The Department of Operative Dentistry is a clinic office that provides conservative treatment for morphological and functional restoration of a tooth that is deficient because of caries and other tooth hard-tissue diseases. It therefore prevents pulp-related and periodontal tissue diseases. Furthermore, we provide treatment for a root of a tooth with the pulp infected by advanced caries, often accompanied with severe pain (root canal therapy). We also provide dental health education. If caries are left untreated, they never heal naturally, so early detection and early cure are necessary. A person might have cavities if they experience sweet pain (pain induced by sweet foods such as chocolate), cold water pain (tooth sensitivity to cold water) and hot water pain (tooth sensitivity to hot water). We also perform sedation dentistry for dentinal hypersensitivity, by which teeth, despite having no caries, are sensitive to cold water or ice cream. Additionally, we perform conservative dentistry using repair materials

(adhesive resin) of the same color as the patient's natural tooth.

Our specialties were "Caries treatment", "Esthetic conservative dentistry", "Treatment using microscope", "Laser treatment".

### Department of Periodontics and Endodontics



Director. Department of Periodontics and Endodontics

### Shogo Takashiba

The Department of Periodontics and Endodontics focuses primarily on the diagnosis and comprehensive treatment for the patients with periodontal and/ or endodontic diseases, such as chronic periodontitis, aggressive periodontitis, gingival overgrowth, pulpitis, and acute/chronic periapical periodontitis. As a training institute approved by Japanese Society of Periodontology (JSP) and Japanese Society of Conservative Dentistry (JSCD), we maintain and provide a highly professional periodontal/ endodontic treatments according to individual patient's pathological conditions and backgrounds in viewpoints of periodontal medicine. The treatments include surgical procedures, such as flap surgery, regenerative therapy of periodontal tissues, periodontal plastic surgery, and apicoectomy using microscope. We strongly recommend our patients to be introduced to regional JSP Board Certificated Periodontists in our SPT (supportive periodontal therapy) network to maintain the stable periodontal condition after our professional periodontal treatments. Our goal is to promote the philosophy of periodontal medicine and to contribute to increase of healthy life expectancy (Soft-Landing Aging: SoLA) by long-term oral management of our patients with periodontal/endodontic diseases.

# Department of Oral Rehabilitation and Implantology



Department of Oral Rehabilitation and Implantology

#### Takuo Kuboki

The Department of Oral Rehabilitation and Implantology mainly provides the prosthetic rehabilitation using fixed or removal prosthesis or oral implants to the outpatients who have missing teeth. Additionally, diagnosis and treatments are also provided to the patients with temporomandibular disorders and other orofacial pain conditions, sleep apnea syndrome, metallic allergy, and so on. The department is designated as a training institution by the Japan Prosthodontic Society, Japanese Society of Oral Implantology, The Japanese Society for Temporomandibular Joint, Japanese Society of Gerodontology, The Japan Association of Oral Rehabilitation, and The Japanese Society of Orofacial Pain.

The staffs of the department always face the clinical dental practice with aiming the progression in quality of the dental care, and provide the patient-centered care to contribute the maintenance and promotion of the people's health. All the dental treatment options are selected and provided to each patient based on the clinical evidence and with the respect of each individual's value.

### Department of Prosthodontics



Director. Department of Prosthodontics

### Shogo Minagi

Treatment of occlusion has an important impact on the rehabilitation of oral function, thus affecting the Quality of Life for every patient.

Our mission is to provide sound, innovative, and cost effective medical/ dental services that meet the highest professional standards for patients with tooth decay, tooth missing, TMD and Orofacial Pain. Our goal is not only to offer a full range of clinical services to our patients, but also to educate every patient about their particular condition. Patients requesting prosthodontic treatment are able to choose from possible options.

Our staff dentists, including supervisory doctors of Japan Prosthodontic Society and specialists, provide common prosthetic care for outpatients and restorative care for missing teeth and jaw bones after surgery. Our department is designated as an official training institution by Japan Prosthodontic Society, Japanese Society of Gerodontology, and Japanese Society for Temporomandibular Joint.

Prosthodontic restorations like crowns, bridges, partial or complete dentures and implant retained restorations are available featuring the most up-to-date techniques and equipment.

### Department of Preventive Dentistry



Department of Preventive Dentistry

#### Manabu Morita

The aim of our department is to make patients to be able to eat with their teeth during the whole lifetime and to maximize their oral function Treatment policy

Two major factors contributing to tooth loss are caries and periodontal disease. Based on the use of fluoride for the former and oral hygiene for the latter, we perform oral treatment, management and maintenance. We meet the needs of patients to raise their degree of their satisfaction with treatment. Above all, we strive to meet their need and desire to preserve their teeth.

#### Specialties

We have a good track record of preserving as many teeth as possible by providing management of caries and periodontal diseases for patients who are asked to visit the office every one to six months to maintain their oral condition.

- Bad-breath (halitosis) treatment : examination, diagnosis, and individualized treatment
- Xerostomia (dry mouth) treatment: examination, diagnosis, treatment, oral care, and advices

# Department of Oral Diagnosis and Dentomaxillofacial Radiology



Director. Department of Oral Diagnosis and Dentomaxillofacial Radiology Junichi Asaumi

The Department of Oral Diagnosis and Dentomaxillofacial Radiology offers diagnostic exams and interpretation with a staff of highly trained radiologists supported by technologists. We support all of the dentistry divisions at Okayama University Hospital. Across local network, patients from medical institutions are also referred to us.

We provide a full suite of exams including x-rays, MRI, cone-beam CT (dental CT), CT, and ultrasonography (US) for all diseases in the oral and maxillofacial area. Intraoral and extraoral radiography such as panoramic and periapical radiography for diseases in the oral and maxillofacial area; MRI scan of the temporomandibular joint disorder (disc displacement) and other diseases (cyst, tumor, and osteomyelitis); cone-beam CT for higher-definition images of local surgeries (i.e. implant-operation, cyst-ectomy and the extraction of a wisdom tooth etc.). Every scan in the oral and maxillofacial area is interpreted by a radiologist. Our radiologists and technologists are experienced specialists in the oral and maxillofacial area.

We do our best to make our patients' radiology experience as comfortable as possible. We strive to make comprehensive diagnosis from the perspective of both radiologist and diagnostician.

### Department of Dental Anesthesiology



Department of Dental Anesthesiology

### Takuya Miyawaki

Dental anesthesiology is positioned as an independent specialty field of dentistry that deals with research regarding biological reactions and the control of invasion in the oral and maxillofacial areas. The Department of Dental Anesthesiology is a specialty department, consisting of dental anesthesiologists who have the Japanese Board of Dental Anesthesiologist (JBDA), which is certificated by the Japanese Dental Society of Anesthesiology, or the Board Certified Dental Anesthesiology Specialist (BCDAS), which is officially approved by the Ministry of Health, Labor and Welfare of Japan. The policy of our department is to provide pain-free, safe, relaxing, and satisfied condition to dental patients during dental treatment or oral and maxillofacial surgery. In the hospital, we specialize in anesthetic management for patients undergoing oral and maxillofacial surgery and for patients with special needs and/or with specific fear of dental treatment, providing sedation, monitored anesthetic care, and general anesthesia. We are also specialists in orofacial pain clinic, including neuropathic pain, myofascial pain, psychogenic pain, and persistent odontogenic pain.

# Department of Oral and Maxillofacial Reconstructive Surgery



Director. Department of Oral and Maxillofacial Reconstructive Surgery Seiji lida

We treat various diseases occurred in oral and maxillofacial region. Our department in particular takes charge of development and practice of advanced therapies for congenital disease and developmental disorder of jaws, which includes cleft lip and/ or palate and jaw deformities.

Treatment system Four of Specialists (including two Advising Doctors) in the Japanese Society of Oral and Maxillofacial Surgeons are mainly in charge of medical examination. Prospective patients carrying a letter of introduction can make a first visit at any time, even if it is not the designated day of the week.

Treatment policies Our department conducts treatment for various diseases that affect tissues around the mouth for sustainment and recovery of its functions. Particularly, cleft lip and cleft palate are conditions that require various therapies along with a patient's development, from birth to adulthood. Our treatment goal is not limited to aesthetic improvement, but to acquisition and maintenance of speech, occlusion, and masticatory functions. As for treatment of oral malignant tumors, we take charge of the field of maxillary reconstruction as a core member of the Head and Neck Cancer Center in Okayama University Hospital, and management and functional recovery of oral environment, in addition to therapy as oral surgery.

Specialties Cleft lip and palate, jaw deformity, dental implants.

# Department of Oral and Maxillofacial Surgery

The Department of Oral and Maxillofacial Surgery mainly provides medical care for patients with oral tumor, oral mucosal diseases, maxillofacial deformities, maxillofacial trauma and serious odontogenic infection. Our team with boardcertified oral and maxillofacial surgeons has specialized knowledge to diagnose and treat wisdom teeth, oral cancer, misaligned jaws, and maxillofacial trauma. Especially, for local advanced oral cancer, we perform superselective intraarterial infusion chemoradiotherapy, which is a combination of radiotherapy and special chemotherapy, to preserve organ and its function. Anticancer drugs are injected super-selectively into targeted cancer through a catheter inserted to a feeding artery directly. Orthognathic surgery, which is surgical correction of misaligned jaws in collaboration with the orthodontists in our hospital or practicing orthodontists, is also one of our specialties. For severe jaw deformities with congenital maxillofacial anomalies, we perform distraction osteogenesis, which is a technique of gradual extension of the jaw. As an advanced treatment, we perform transplantation of autologous particulate cancellous bone and marrow with tailor-made titanium mesh tray for bone defect after tumor resection, following implant dental prosthetics to restore oral functions.

# Department of Orthodontics



Director. Department of Orthodontics Hiroshi Kamioka

Our aim is to obtain optimal occlusion and stable oral functions by moving teeth and to attain a balanced, beautiful face by performing surgical procedures and by controlling the growth of the bones of the jaw and face, and teeth.

Treatment) We offer all the orthodontic services provided by a modern orthodontic practice in a patient-centered, high quality, innovative, efficient, comfortable, and safe environment. Novel treatment techniques such as orthodontic anchor screws, lingual orthodontic appliances, and other forms of esthetic braces are available.

Treatment system Taking advantage of the university hospital's characteristics, we provide comprehensive treatments in cooperation with different dental and medical departments such as oral surgery, plastic surgery, neurosurgery and pediatrics, as well as dental departments such as operative dentistry, preventive dentistry, pediatric dentistry, and prosthesis.

Treatment policy After detailed analyses of examination results, a sciencebased diagnosis is established through discussion by several specialists including the department director. In many cases, we offer not a single treatment plan but multiple options considering each patient's complaints and ask the patient to select the optimal treatment depending on the patient's condition.

### Department of Pediatric Dentistry



Department of Pediatric Dentistry

### Michiyo Nakano

We aim to produce and maintain a healthy oral cavity for children of all ages, from breast-fed babies to adolescents, by effective prevention and treatment of their dental problems.

Our dentists include specialists and advisers to specialists certified by the Japanese Society of Pediatric Dentistry. Their aim is to provide individualized care for their patients depending on need. By seeking to reveal potential problems early and treat conditions that might stunt a healthy oral environment, we aim to important and effective approaches for preventing new problems from occurring.

Our goal is to provide effective dental treatment based on an individualized treatment plan for patients with various problems such as caries and periodontal diseases, which can develop from infancy and continue childhood to puberty. In addition, our team organized by the dentists, hygienists, and nurses. We provide the dental treatment for the children with handicapped, genetic diseases, especially blood cancer, who need special care.





### By Train JR Tokaido-Sanyo Shinkansen Nozomi

**Flights** 

from Sapporo

from Naha



from Tokyo	3hour 20minutes
from Nagoya	1hour 40minutes
from Kyoto	1hour 10minutes
from Shin-Osaka	50minutes
from Hakata	1hour 40minutes



#### OKAYAMA UNIVERSITY HOSPITAL

about 2hours

about 1hour 50minutes

2-5-1 Shikata-Cho, Kita-Ku, Okayama 700-8558, JAPAN Tel. +81-86-223-7151 Fax. +81-86-235-7636 https://www.okayama-u.ac.jp/user/hospital/en/index.html

