

Education and Research Programs (Amount granted: more than 10 million yen) Data as of July 1, 2020

MEXT: Ministry of Education, Culture, Sports, Science and Technology
 METI: Ministry of Economy, Trade and Industry
 MHLW: Ministry of Health, Labour and Welfare
 MIC: Ministry of Internal Affairs and Communications
 ERCA: Environmental Restoration and Conservation Agency
 JST: Japan Science and Technology Agency
 AMED: Japan Agency for Medical Research and Development

■ Promotion Plan for the Platform of Human Resource Development for Cancer (MEXT)

Funding Period	Partner Organizations	Program	Responsible Department
2017-2021	Sapporo Medical University Hokkaido University Asahikawa Medical University Health Sciences University of Hokkaido	Hokkaido Promotion Plan for the Platform of Human Resource Development for Cancer	Faculty of Medicine

■ Project for Enhancing the Human Resource Development Function at Universities, Graduate Schools and Affiliated Hospitals (Problem-Solving Oriented Training Program for Advanced Medical Personnel) (MEXT)

Funding Period	Partner Organizations	Project	Research Director
2019-2021	Hokkaido University Kyoto University Chiba University	Human Resource Development Specialized in Promoting the Use of Donated Cadaver in Clinical Medicine	SHICHINOHE Toshiaki, M.D., Ph.D. Associate Professor, Department of Gastroenterological Surgery II

■ Activity in International Standardization in the Governmental Strategic Field (METI)

Funding Period	Project	Leader/R&D Chief
2020-2022	International Standardization Relating to the Data for the Prediction About Prognosis After Radiotherapy	SHIRATO Hiroki, M.D., Ph.D. Professor, Department of Proton Beam Therapy Medicine

■ Project of the Ministry of the Environment (Cooperative Government Offices: MHLW, MEXT)

Funding Period	Collaborating Research Institutes in Hokkaido	Project	Hokkaido Regional Center Representative
2010-2032 Survey period: 21 years (recruitment: 3 years follow-up: 13 years analysis: 5 years)	Hokkaido University Sapporo Medical University Asahikawa Medical University The Japanese Red Cross Hokkaido College of Nursing	Japan Environment and Children's Study	KISHI Reiko, M.D., Ph.D., M.P.H. Specially Appointed Invited Professor, Center for Environmental and Health Sciences

■ Possible Health Effects on the Human Body from Radio Wave Exposure: Study on Risk Assessment (MIC)

Funding Period	Program	Project Representative
2019-2023	The Effect of Radio Frequency Wave on Children's Health: Epidemiological Study	KISHI Reiko, M.D., Ph.D., M.P.H. Specially Appointed Invited Professor, Center for Environmental and Health Sciences

■ Environment Research and Technology Development Fund (ERCA)

Funding Period	Project	Project Representative
2020-2022	Exposure Sources of Environmental Chemicals and Their Effect on Adolescent Health	ARAKI Atsuko, Ph.D. Specially Appointed Associate Professor, Center for Environmental and Health Sciences

■ Strategic Basic Research Programs (CREST) (JST)

Funding Period	Program	Research Director
2016–2020	Detecting Premonitory Signs and Real-time Forecasting of Pandemics Using Big Biological Data	NISHIURA Hiroshi, M.D., Ph.D. Professor, Department of Hygiene

■ A-STEP (Adaptable and Seamless Technology Transfer Program through Target-driven R&D) (JST)

Funding Period	Program	Research Director
2019–2020	Understanding of the Molecular Mechanism of Tumor Tissue Behavior Induced by Micro/Nanoplates and the Establishment of Micro/Nanoplate Mass Production	MIYATAKE Yukiko, Ph.D. Assistant Professor, Department of Pathology

■ COI STREAM (JST)

Funding Period	Name of the Site	Leader
2013–2021	Innovative Food & Healthcare MASTER	Project Leader: YOSHINO Masanori, Hitachi, Ltd. Research Leader: TAMAKOSHI Akiko, M.D., Ph.D. Professor, Department of Public Health

■ Project Focused on Developing Key Technology for Discovering and Manufacturing Drugs for Next-Generation Treatment and Diagnosis (AMED)

Funding Period	Commissioned Project	Leader
2016–2020	The Project for Utilizing Glycans in the Development of Innovative Drug Discovery Technologies	FURUKAWA Jun-ichi, Ph.D. Specially Appointed Associate Professor, Department of Advanced Clinical Glycobiology

■ Development of Medical Devices and Systems for Advanced Medical Services (AMED)

Funding Period	Program	Research Representative
2017–2021	Development of Intraoperative On-the-fly Therapeutic Decision Support System during Quantum Beam Surgery (QBS) and post-QBS Surgical Operation	SHIMIZU Shinichi, M.D., Ph.D. Professor, Department of Radiation Medical Science and Engineering

■ Project of Translational and Clinical Research Core Centers (AMED)

Funding Period	Commissioned Project	Leader
2018–2020	Development of Reparative Material for Intervertebral Disc Regeneration	SUDO Hideki, M.D., Ph.D. Specially Appointed Associate Professor, Department of Advanced Medicine for Spine and Spinal Cord Disorders
2018–2020	Establishing Non-clinical POC of Real-world Adaptive Proton Beam Therapy System that Develops Motion Tracking Technology and Acquires Temporal Change of Three-dimensional Shape and Position of Cancer According to the Course of Time	SHIMIZU Shinichi, M.D., Ph.D. Professor, Department of Radiation Medical Science and Engineering

■ Advanced Research & Development Programs for Medical Innovation (AMED)

Funding Period	Commissioned Project	Leader
2018–2021	Study of the Cellular and Cell Adhesion Molecule Mechanisms Underlying Peripheral Nerve Axon Regeneration	KADOYA Ken, M.D., Ph.D. Specially Appointed Associate Professor, Department of Advanced Research for Locomotor System

■ Practical Research Project for Rare/Intractable Diseases (AMED)

Funding Period	Commissioned Project	Leader
2018-2020	Natural History of Multiple System Atrophy and the Development of Novel Biomarkers	YABE Ichiro, M.D., Ph.D. Associate Professor, Department of Neurology
2020-2022	Early MRI Diagnosis of Amyotrophic Lateral Sclerosis using Stable Isotope of Oxygen-17	KUDO Kohsuke, M.D., Ph.D. Professor, Department of Diagnostic Imaging

■ Practical Research for Innovative Cancer Control (AMED)

Funding Period	Commissioned Project	Leader
2019-2021	Efficacy of Rikkunshito on Chemotherapy-Induced Nausea and Vomiting in Patients with Uterine Corpus or Cervical Cancer Treated with Cisplatin-Based Regimen - Placebo-Controlled, Double-Blind, Randomized Confirmatory Study	WATARI Hidemichi, M.D., Ph.D. Professor, Department of Obstetrics and Gynecology
2020-2022	Establishment of Standard Therapy for Acute Lymphoblastic Leukemia in Children	MANABE Atsushi, M.D., Ph.D. Professor, Department of Pediatrics
2020-2022	The Development of New Treatment of Superselective Intra-Arterial Infusion of Cisplatin and Concomitant Radiotherapy for Patients with Locally Advanced Maxillary Sinus Cancer	HOMMA Akihiro, M.D., Ph.D. Professor, Department of Otolaryngology-Head and neck Surgery

■ Research Program on Emerging and Re-emerging Infectious Diseases (AMED)

Funding Period	Commissioned Project	Leader
2020-2022	Study of Expanding the Use of Mathematical Models in Infectious Disease Interventions	NISHIURA Hiroshi, M.D., Ph.D. Professor, Department of Hygiene

■ Practical Research Project to Overcome Hepatitis / Emergency Measures Research Project to Overcome Hepatitis(AMED)

Funding Period	Commissioned Project	Leader
2020-2022	Screening of Prognostic Biomarker by Comprehensive Serum and Liver Tissue Glycomics	SAKAMOTO Naoya, M.D., Ph.D. Professor, Department of Gastroenterology and Hepatology

■ Research Center Network for Realization of Regenerative Medicine
The Program for Technological Innovation of Regenerative Medicine (AMED)

Funding Period	Commissioned Project	Leader
2020-2022	Development of Cell Therapy to Treat Combined Lumbar Canal Stenosis Using Highly-Pure Allogenic Bone Marrow-Derived Mesenchymal Stem Cells (REC)	SUDO Hideki, M.D., Ph.D. Specially Appointed Associate Professor, Department of Advanced Medicine for Spine and Spinal Cord Disorders

■ Project for Cancer Research and Therapeutic Evolution (P-CREATE) (AMED)

Funding Period	Commissioned Project	Leader
2020-2021	Study of Regulation of Tumor Heterogeneity by Biomaterial	TANAKA Shinya, M.D., Ph.D. Professor, Department of Cancer Pathology

■ Emerging/Re-emerging Infectious Disease Research Base Project (multidisciplinary research area)(AMED)

Funding Period	Commissioned Project	Leader
2020-2022	Elucidation of Properties and Evolutionary Mechanisms of Virome Involved in Progression of Pathogenesis	FUKUHARA Takasuke, M.D., Ph.D. Professor, Department of Microbiology and Immunology

■ Special Expenditures (MEXT)

Funding Period	Faculties	Project	Leader
2016-2020	Faculty of Medicine	Plan to Nurture Individuals with Forensic Medical Knowledge for Cause-of-Death Investigation	YOSHIOKA Mitsuhiro, M.D., Ph.D. Dean
2016-2020	Global Institution for Collaborative Research and Education (GI-CoRE) Faculty of Advanced Life Science Faculty of Medicine Research Institute for Electronic Science Hokkaido University Hospital	Creation of an International Collaborative Research and Education Center for Soft Matter: Establishment of the International Graduate School of Soft Matter	NAWA Toyoharu, Ph.D. President (Representative name at the time of contract)
2019-2023	Global Institution for Collaborative Research and Education (GI-CoRE) Faculty of Medicine	Real-world Medical Research through the Fusion of Quantum Science, Information Science and Advanced Medical Biology - Striving for World-leading Cancer Treatment in a New Age	NAWA Toyoharu, Ph.D. President (Representative name at the time of contract)