

Research Activities

MEXT: Ministry of Education, Culture, Sports, Science and Technology
 MHLW: Ministry of Health, Labour and Welfare
 METI: Ministry of Economy, Trade and Industry
 MOE: Ministry of the Environment
 JST: Japan Science and Technology Agency
 AMED: Japan Agency for Medical Research and Development
 NARO: National Agriculture and Food Research Organization
 NIBIO: National Institute of Biomedical Innovation

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

Funding Period	Partner Organizations	Program	Responsible Department
2012-2016	Sapporo Medical University, Hokkaido University, Asahikawa Medical University, Health Sciences University of Hokkaido	Training Program for Medical Personnel Responsible for the Hokkaido Cancer Care	Graduate School of Medicine

■ Project for Developing Innovation Systems (MEXT)

Funding Period	Program	Grantee
2006-2015	Creation of Innovation Centers for Advanced Interdisciplinary Research Areas Program -The Matching Program for Innovations in Future Drug Discovery and Medical Care-	Keizo Yamaguchi, Ph.D. President
2012-2016	Regional Innovation Strategy Support Program - HOKUDAI R&BP - Development of "Health Care Innovations" such as the Formation of an "Integrated Center for Health Science and Medical Technology" Focusing on the Functionalities of Food Researcher : Hiroki Shirato, M.D., Ph.D. Professor, Department of Radiation Medicine	Keizo Yamaguchi, Ph.D. President

■ Translational Research Network Program (MEXT)

Funding Period	Organization	Project	Representative
2012-2016	Hokkaido Organization for Translational Research(Hokkaido University, Sapporo Medical University, Asahikawa Medical University)	All Hokkaido Translational Research Project for Advanced Medicine	Keizo Yamaguchi, Ph.D. President

■ Strategic Research Program for Brain Sciences (MEXT)

Funding Period	Commissioned Project	Leader
2011-2015	Integrated Approach to Treatment-Resistant Mood Disorders Focusing on the Dopaminergic System	Mitsuhiro Yoshioka, M.D., Ph.D. Professor, Department of Neuropharmacology

■ Project for Development of Innovative Research on Cancer Therapeutics (MEXT)

Funding Period	Commissioned Project	Leader
2011-2015	Development of Seeds for the Cancer Treatment that Targets Ubiquitin-related Enzymes	Shigetsugu Hatakeyama, M.D., Ph.D. Professor, Department of Medical Chemistry

■ Brain Mapping by Integrated Neurotechnologies for Disease Studies (MEXT)

Funding Period	Commissioned Project	Leader
2014-2016	Development of Technologies for Pathway-specific Manipulation and Structural Analysis of Neural Circuits Aiming at Functional Brain Research of Common Marmosets	Masahiko Watanabe, M.D., Ph.D. Professor, Department of Anatomy and Embryology

■ Initiative for Accelerating Regulatory Science in Innovative Drug, Medical Device, and Regenerative Medicine (MHLW)

Funding Period	Project	General Research Representative
2012-2016	Initiative for Accelerating Regulatory Science in Innovative Drug, Medical Device, and Regenerative Medicine	Kiyohiro Houkin, M.D., Ph.D. Director, Hokkaido University Hospital

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

Funding Period	Project	Leader/R&D Chief
2014–2016	International Standardization Regarding Real-time Control System and Related Things in Radiotherapy for Moving Targets	Hiroki Shirato, M.D., Ph.D. Professor, Department of Radiation Medicine

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

Funding Period	Collaborating Research Institutes in Hokkaido	Project	Hokkaido Regional Center Representative
2011–2032 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	Reiko Kishi, M.D., Ph.D., M.P.H. Specially Appointed Invited Professor, Center for Environmental and Health Sciences

■ Environment Research and Technology Development Fund of MOE

Funding Period	Project	Project Representative
2014–2016	Environmental Chemical Exposure in Early Life and the Neurodevelopment of Children: the Role of Environment, Gene and Epigenome.	Reiko Kishi, M.D., Ph.D., M.P.H. Specially Appointed Invited Professor, Center for Environmental and Health Sciences
2015–2017	Effect of Fetal Exposure to Endocrine Disruptor on Sex Differentiation, Gonadal Function and Puberty: Elucidation of Gene-Environment Interaction on Sexual Development	Nobuo Shinohara, M.D., Ph.D. Professor, Department of Renal and Genitourinary Surgery

■ Strategic Basic Research Programs (PRESTO) (JST)

Funding Period	Program	Leader
2013–2016	Imaging, Control, and Reconstruction of Cellular Network in Master Circadian Clock	Ryosuke Enoki, Ph.D. Assistant Professor, Research Center for Cooperative Projects

■ Next Generation Technology Transfer Program (NexTEP) (JST)

Funding Period	Program	Leader
2014–2023	Animal Experiment for Mechanism Elucidation in a Novel Cartilage Tissue Engineering Technique Using Ultra-purified Alginate Gel	Norimasa Iwasaki, M.D., Ph.D. Professor, Department of Orthopedic Surgery

■ The Center of Innovation (COI) Program (JST)

Funding Period	Program	Leader
2013–2021	Innovative Food & Healthcare MASTER	Hiroyuki Tsutsui, M.D., Ph.D. Professor, Department of Cardiovascular Medicine

■ Strategic Basic Research Programs (CREST) (AMED)

Funding Period	Program	Leader
2013–2018	Identification of Novel Scavenging System in Organisms and Its Therapeutic Application	Masaharu Nishimura, M.D., Ph.D. Professor, Department of Respiratory Medicine

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

Funding Period	Program	R&D Representative
2014–2016	Research and Development of the Advanced Medical System by use of Medical Information/Research and Development of Navigation System for Cancer Diagnosis and Treatment	Hiroki Shirato, M.D., Ph.D. Professor, Department of Radiation Medicine

■ Integration Research for Agriculture and Interdisciplinary Fields (NARO)

Funding Period	Program	Research Representative
2014-2016	Assessment of Japanese Diet and its Influence on Health	Akiko Tamakoshi, M.D., Ph.D. Professor, Department of Public Health
2014-2016	Beneficial Effects of Japanese Diet on Stress Relief and Brain Functions	Ichiro Kusumi, M.D., Ph.D. Professor, Department of Psychiatry

■ Grant to Assist Research and Development of Orphan Drugs and Orphan Medical Devices (NIBIO)

Funding Period	Program	Development Representative
2014-2016	Treatment of Revertant Mosaicism-based Autologous Cultured Epidermal Sheet Transplantation for Refractory Congenital Skin Disorders	Hiroshi Shimizu, M.D., Ph.D. Professor, Department of Dermatology

■ Special Expenditures (MEXT)

Funding Period	Faculties	Project	Leader
2011-2015	Graduate School of Medicine Faculty of Engineering Faculty of Advanced Life Science Hokkaido University Hospital	“Reverse Translational Research from Advanced Medical Technology to Advanced Life Science; from Real-time Tracking Technology to Real-time Tracking Life Science”	Masanori Kasahara, M.D., Ph.D. Dean
2013-2017	Creative Research Institution Faculty of Advanced Life Science Graduate School of Medicine	Better Quality of Living through Novel Soft and Wet Materials - Interdisciplinary Center for Polymer Materials Science and Regenerative Medicine	Kazushige Kawabata, Ph.D. Director, Executive Office for Research Strategy
2014-2018	Graduate School of Medicine Graduate School of Veterinary Medicine	Global Institution for Collaborative Research and Education (GI-CoRE) (National Universities Functional Enhancement)	Keizo Yamaguchi, Ph.D. President