

List of the Continuing Projects for Grant-in-Aid for Scientific Research on Innovative Areas (Research in a proposed research area) of KAKENHI

Humanities and Social Sciences (3 Projects)

Head Investigator		Title	Term of Project	Total (Thousand yen)
Shinichiro Tabata	Hokkaido University, Slavic Research Center, Professor	Comparative Research on Major Regional Powers in Eurasia	FY2008-2012	515,100
Kazuo Aoyama	Ibaraki University, Faculty of Humanities, Professor	Pan Pacific Environmental Changes and Civilizations	FY2009-2013	524,700
Takeru Akazawa	Kochi University of Technology, Research Institute, Professor	Replacement of Neanderthals by Modern Humans: Testing Evolutionary Models of Learning	FY2010-2014	713,500

Science and Engineering (28 Projects)

Head Investigator		Title	Term of Project	Total (Thousand yen)
Kazuo Ueda	The University of Tokyo, Institute for Solid State Physics, Professor	Emergence of Heavy Electrons and Their Ordering	FY2008-2012	1,214,100
Takehiko Yagi	The University of Tokyo, Institute for Solid State Physics, Professor	Earth Science Based on the High Pressure and Temperature Neutron Experiments	FY2008-2012	828,100
Makoto Gonokami	The University of Tokyo, Graduate School of Science, Professor	Optical Science of Dynamically Correlated Electrons	FY2008-2012	1,107,300
Sinya Aoki	University of Tsukuba, Graduate School of Pure and Applied Sciences, Professor	Research on the Emergence of Hierarchical Structure of Matter by Bridging Particle, Nuclear and Astrophysics in Computational Science	FY2008-2012	479,300
Mizuo Maeda	RIKEN, Bioengineering Laboratory, Chief Scientist	Molecular Soft-Interface Science	FY2008-2012	903,100
Masahide Terazima	Kyoto University, Graduate School of Science, Professor	Molecular Science of Fluctuations toward Biological Functions	FY2008-2012	1,053,400
Takeshi Akasaka	University of Tsukuba, Graduate School of Pure and Applied Sciences, Professor	Emergence of Highly Elaborated --Space and Its Function	FY2008-2012	760,700
Tetsuro Urabe	The University of Tokyo, Graduate School of Science, Professor	Project TAIGA (Trans-crustal Advection & In-situ bio-geochemical processes of Global sub-seafloor Aquifer)	FY2008-2012	967,800
Kazushi Kanoda	The University of Tokyo, Graduate School of Engineering, Professor	New frontier in materials science opened by molecular degrees of freedom	FY2008-2012	1,125,800
Tomoji Kawai	Osaka University, Institute of Science and Engineering, Specially Appointed Professor	Emergence in Chemistry	FY2008-2012	1,134,600
TSAI Jaw-Shen	RIKEN Advanced Science Institute, Macroscopic Quantum Coherence Team, Team Leader	Quantum cybernetics : Interdisciplinary research on quantum control and its application to quantum computation	FY2009-2013	1,064,100
Hidefumi Kobatake	Tokyo University of Agriculture and Technology, Graduate School of Engineering, Professor	Computational Anatomy for Computer-aided Diagnosis and Therapy	FY2009-2013	982,000
Noboru Sasao	Okayama University, Research Core for Extreme Quantum World, Professor	Extreme quantum world opened up by atoms- towards establishing comprehensive picture of the universe based on particle physics-	FY2009-2013	988,700

Head Investigator		Title	Term of Project	Total (Thousand yen)
Toru Iijima	Nagoya University, Center for Experimental Studies, Professor	Elucidation of New Hadrons with a Variety of Flavors	FY2009-2013	1,104,600
Junichi Yoshida	Kyoto University, Graduate School of Engineering, Professor	Organic Synthesis Based on Reaction Integration. Development of New Methods and Creation of New Substances	FY2009-2013	1,088,100
Gaku Kimura	The University of Tokyo, Graduate School of Science, Professor	New perspective of great subduction-zone earthquakes from the super deep drilling	FY2009-2013	841,500
Hiroshi Nishihara	The University of Tokyo, Graduate School of Science, Professor	Coordination Programming – Science of Molecular Superstructures for Chemical Devices	FY2009-2013	1,084,300
Eiichi Takahashi	Tokyo Institute of Technology, Graduate School of Science and Engineering, Professor	Geofluids: Nature and dynamics of fluids in subduction zones	FY2009-2013	955,400
Masaharu Shiratani	Kyushu University, Graduate School of Information Science and Electrical Engineering, Professor	Frontier science of interactions between plasmas and nano-interfaces	FY2009-2013	896,300
Masashi Hazumi	High Energy Accelerator Research Organization, Institute of Particle and Nuclear Studies, Professor	The Physical Origin of the Universe viewed through the Cosmic Background Radiation – from Cosmological Inflation to Dark Ages –	FY2009-2013	1,143,500
Nobuhiro Tsuji	Kyoto University, Graduate School of Engineering, Professor	Bulk Nanostructured Metals	FY2010-2014	1,168,200
Yoshiteru Maeno	Kyoto University, Graduate School of Science, Professor	Topological Quantum Phenomena in Condensed Matter with Broken Symmetries	FY2010-2014	794,400
Atsushi Oshiyama	The University of Tokyo, School of Engineering, Professor	Materials Design through Computics: Complex Correlation and Non-equilibrium Dynamics	FY2010-2014	754,800
Naoto Chatani	Osaka University, Graduate School of Engineering, Professor	Molecular Activation Directed toward Straightforward Synthesis	FY2010-2014	1,244,000
Hisashi Nakamura	The University of Tokyo, Research Center for Advanced Science and Technology, Professor	Multi-Scale Air-Sea Interaction under the East-Asian Monsoon: A ‘Hot Spot’ in the Climate System	FY2010-2014	980,000
Takashi Kato	The University of Tokyo, Graduate School of Engineering, Professor	Fusion Materials: Creative Development of Materials and Exploration of Their Function through Molecular Control	FY2010-2014	1,035,000
Hideaki Oikawa	Hokkaido University, Graduate School of Science, Professor	Biosynthetic Machinery: Deciphering and Regulating the System for Creating Structural Diversity of Bioactive Metabolites	FY2010-2014	723,300
Masanori Hangyo	Osaka University, Institute of Laser Engineering, Professor	Electromagnetic Metamaterial	FY2010-2014	887,700

Biological Sciences (36 Projects)

Head Investigator		Title	Term of Project	Total (Thousand yen)
Toshifumi Inada	Tohoku University, Graduate School of Pharmaceutical Science, Professor	Diversity and asymmetry achieved by RNA program (RNA regulation)	FY2008-2012	1,060,100
Tamotsu Yoshimori	Osaka University, Graduate School of Frontier Biosciences, Professor	Intracellular Logistics: Interdisciplinary Approaches to Pathophysiology of Membrane Traffic	FY2008-2012	1,317,500
Yasushi Hiraoka	Osaka University, Graduate School of Frontier Biosciences, Professor	The physicochemical field for genetic activities	FY2008-2012	1,238,300

Head Investigator		Title	Term of Project	Total (Thousand yen)
Yuichi Iino	The University of Tokyo, Graduate School of Science, Professor	Systems molecular ethology to understand the operating principle of the nervous system	FY2008-2012	1,076,100
Shosei Yoshida	National Institutes of Natural Sciences, National Institute for Basic Biology, Division of Germ Cell Biology, Professor	Regulatory Mechanism of Gamete Stem Cells	FY2008-2012	876,600
Takaaki Akaike	Kumamoto University, Graduate School of Medical Sciences, Professor	Signaling functions of reactive oxygen species	FY2008-2012	1,123,900
Hitoshi Sawada	Nagoya University, Graduate School of Science, Professor	Elucidating Common Mechanisms of Allogeneic Authentication: Mechanisms of Sexual Reproduction Shared by Animals and Plants	FY2009-2013	1,096,000
Mamoru Sato	Yokohama City University, Graduate School of Nanobioscience, Professor	Target recognition and expression mechanism of intrinsically disordered protein	FY2009-2013	1,223,100
Ichiro Terashima	The University of Tokyo, Graduate School of Science, Professor	Comprehensive studies of plant responses to high CO2 world by an innovative consortium of ecologists and molecular biologists	FY2009-2013	1,259,200
Yukihide Tomari	The University of Tokyo, Institute of Molecular and Cellular Biosciences, Associate Professor	Functional machinery of non-coding RNAs	FY2009-2013	833,000
Toshihiko Fujimori	National Institute for Basic Biology, Division of Embryology, Professor	Cell community in early mammalian development	FY2009-2013	1,068,200
Kensuke Miyake	The University of Tokyo, The Institute of Medical Science, Professor	Homeostatic inflammation: Molecular basis and dysregulation	FY2009-2013	1,247,200
Hitoshi Okazawa	Tokyo Medical and Dental University, Medical Research Institute, Department of Neuropathology, Professor	Foundation of Synapse and Neurocircuit Pathology	FY2010-2014	1,220,400
Takaki Miyata	Nagoya University, Graduate School of Medicine, Professor	Cross-talk between moving cells and microenvironment as a basis of emerging order in multicellular system	FY2010-2014	1,273,500
Kohei Miyazono	The University of Tokyo, Graduate School of Medicine, Professor	Integrative Research on Cancer Microenvironment Network	FY2010-2014	1,276,000
Michiyuki Matsuda	Kyoto University, Graduate School of Biostudies, Professor	Multi-dimensional fluorescence live imaging of cellular functions and molecular activities	FY2010-2014	1,282,800
Masanori Hatakeyama	The University of Tokyo, Graduate School of Medicine, Professor	Infection/inflammation-assisted acceleration of the carcinogenic spiral and its interception through vector conversion of host response to tumors	FY2010-2014	1,162,100
Akinao Nose	The University of Tokyo, Graduate School of Frontier Sciences, Professor	Mesosopic neurocircuitry: towards understanding of the functional and structural basis of brain information processing	FY2010-2014	1,193,500
Takehiko Yokomizo	Kyushu University, Graduate School of Medical Sciences, Professor	Machineries of bioactive lipids in homeostasis and diseases	FY2010-2014	1,251,500
Jun-ichiro Inoue	The University of Tokyo, Institute of Medical Science, Professor	Regulation of Signal Transduction by Post-translational Modifications and Its Pathogenic Dysregulation	FY2010-2014	1,167,800
Toshio Kitamura	The University of Tokyo, Institute of Medical Science, Professor	Elucidation of molecular mechanisms for cell fate decision in cell differentiation that proceeds to multiple directions step by step	FY2010-2014	1,266,400
Jian Feng Ma	Okayama University, Institute of Plant Science and Resources, Professor	Integrated Analysis of Strategies for Plant Survival and Growth in Response to Global Environmental Changes	FY2010-2014	1,234,700

Head Investigator		Title	Term of Project	Total (Thousand yen)
Akira Nagatani	Kyoto University, Graduate School of Science, Professor	Environmental sensing of plants: Signal perception, processing and cellular responses	FY2010-2014	1,267,300
Toshio Hakoshima	Nara Institute of Science and Technology, Graduate School of Biological Sciences, Professor	Structural basis of cell signaling complexes mediating signal perception, transduction and responses	FY2010-2014	1,284,000
Yoshiko Takahashi	Nara Institute of Science and Technology, Graduate School of Biological Sciences, Professor	Cellular and Molecular Basis for Neuro-vascular Wiring	FY2010-2014	1,180,400
Tetsuo Yamamori	National Institute for Basic Biology, The Graduate University for Advanced Studies (SOKENDAI), Professor	Neuronal diversity and neocortical organization	FY2010-2014	1,226,000
Kiyokazu Agata	Kyoto University, Graduate School of Science, Professor	Molecular mechanisms underlying reconstruction of 3D structures during regeneration	FY2010-2014	648,100
Akira Shinohara	Osaka University, Institute for Protein Research, Professor	Systematical studies of chromosome adaptation	FY2010-2014	1,238,100
Kenji Kangawa	National Cerebral and Cardiovascular Center, Research Institute, Director General	Molecular Basis and Disorders of Control of Appetite and Fat Accumulation	FY2010-2014	1,340,400
Hiroyuki Takeda	The University of Tokyo, Graduate School of Science, Professor	From molecules and cells to organs: trans-hierarchical logic for higher-order pattern and structures	FY2010-2014	1,340,400
Mitsuyasu Hasebe	National Institutes of Natural Sciences, National Institute for Basic Biology, Professor	Genetic Bases for the Evolution of Complex Adaptive Traits	FY2010-2014	1,308,700
Shoji Tsuji	The University of Tokyo, Graduate School of Medicine, Professor	Exploring molecular basis for brain diseases based on personal genomics	FY2010-2014	1,203,800
Koichi Akashi	Kyushu University, Graduate School of Medical Sciences, Professor	Development of Novel Treatment Strategies Targeting Cancer Stem Cells	FY2010-2014	1,385,700
Fumio Hanaoka	Gakushuin University, Faculty of Science, Professor	Coupling of replication, repair and transcription, and their common mechanism of chromatin remodeling	FY2010-2014	1,194,800
Ken-ichirou Morohashi	Kyushu University, Graduate School of Medical Sciences, Professor	Molecular Mechanisms for Establishment of Sex Differences	FY2010-2014	1,017,500
Takehiko Sasazuki	Kyushu University, Institute for Advanced Study, University Professor	HLA polymorphism, disease and evolution	FY2010-2014	1,191,600

Interdisciplinary Area (11 Projects)

Head Investigator		Title	Term of Project	Total (Thousand yen)
Makoto Suzuki	Tohoku University, Graduate School of Engineering, Professor	Water plays the main role in ATP energy transfer	FY2008-2012	632,400
Ryusuke Kakigi	National Institutes of Natural Sciences, National Institute for Physiological Sciences, Department of Integrative Physiology, Professor	Face perception and recognition: Multidisciplinary approaching to understanding face processing mechanisms	FY2008-2012	597,000
Shiro Hatakeyama	Tokyo University of Agriculture and Technology, Institute of Agriculture, Professor	Impacts of Aerosols in East Asia on Plants and Human Health	FY2008-2012	1,052,200
Hajime Kayanne	The University of Tokyo, Graduate School of Science, Professor	Coral Reef Science –Strategy for Ecosystem Symbiosis and Coexistence with Human Beings under Multiple Stresses–	FY2008-2012	574,700
Naomi Miyake	The University of Tokyo, Graduate School of Education, Professor	Founding a creative society via collaboration between humans and robots	FY2009-2013	928,400
Norito Kawakami	The University of Tokyo, Graduate School of Medicine, Professor	Elucidation of social stratification mechanism and control over health inequality in contemporary Japan: New interdisciplinary area of social and health sciences	FY2009-2013	844,700
Ichiro Tsuda	Hokkaido University, Research Institute for Electronic Science, Professor / Hokkaido University, Research Center for Integrative Mathematics, Director	The study on the neural dynamics for understanding communication in terms of complex hetero systems	FY2009-2013	973,900
Ichio Shimada	The University of Tokyo, Graduate School of Pharmaceutical Sciences, Professor	Integrative understanding of biological processes mediated by transient macromolecular complexes; New technology for visualizing physiologically metastable states.	FY2009-2013	1,270,100
Satoru Miyano	The University of Tokyo, Institute of Medical Science, Professor	Integrative Systems Understanding of Cancer for Advanced Diagnosis, Therapy, and Prevention	FY2010-2014	1,202,200
Hidehiko Komatsu	National Institutes of Natural Sciences, National Institute for Physiological Sciences, Professor	Integrative studies of neural mechanisms and advanced information technologies for perception of material and surface qualities	FY2010-2014	1,042,000
Yoshihisa Kurachi	Osaka University, Graduate School of Medicine, Professor	Establishment of Integrative Multi-level Systems Biology and its Applications	FY2010-2014	1,371,900