

List of the Continuing Projects for Grant-in-Aid for Scientific Research (S) of KAKENHI

Integrated Science and Innovative Science (77 Projects)

○ Comprehensive fields (38 Projects)

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Yuji Oie	Kyushu Institute of Technology, Graduate School of Faculty of computer science and systems engineering, Professor	Research on Fusion Technology and Information Dynamics for Penetrative and Evolutional Network	FY2006-2010	80,500
Keiji Kawachi	The University of Tokyo, Graduate School of Engineering, Professor	Control Mechanism of Insect Flight	FY2006-2010	76,400
Toshiya Manabe	The University of Tokyo, Institute of Medical Science, Professor	Molecular basis for emotion and its role in higher brain functions and psychiatric and neurological disorders	FY2006-2010	84,200
Kensaku Mori	The University of Tokyo, Graduate School of Medicine, Professor	Behavioral state-dependent change in the information processing modes in the central olfactory system	FY2006-2010	83,200
Kenji Sunagawa	Kyushu University, Graduate School of Medical Sciences, Professor	Exploration into the Development of Bionic Blood Pressure Controller in Patients with Spinal Cord Injuries	FY2006-2010	84,700
Yoshinori Yasuda	International Research Center for Japanese Studies, Research Department, Professor	Environmental annual history and rise and fall of the rice-cultivating and fishing civilization by the study of annually laminated sediments	FY2006-2010	84,900
Toyoaki Nishida	Kyoto University, Graduate School of Informatics, Professor	Studies on Construction and Utilization of a Common Platform for Embodied Conversational Agent Research	FY2007-2011	89,500
Masatoshi Ishikawa	The University of Tokyo, Graduate School of Information Science and Technology, Professor	Applications of Vision Chip	FY2007-2011	85,200
Hiroshi Okuno	Kyoto University, Graduate School of Informatics, Professor	Development of Robot Audition from Computational Auditory Scene Analysis	FY2007-2011	91,800
Toshikazu Kato	Chuo University, Faculty of Science and Engineering, Professor	Robotics modeling of diversity of multiple KANSEI and situation understanding in real space	FY2007-2011	62,000
Masahiko Watanabe	Hokkaido University, Graduate School of Medicine, Professor	Molecular mechanisms for calcium-mediated refinement of competitive synaptic wiring in the brain	FY2007-2011	89,900
Takeshi Yagi	Osaka University, Graduate School of Frontier Biosciences, Professor	Molecular mechanism for neuronal diversity and organization in the brain	FY2007-2011	87,300
Junichi Hayashi	University of Tsukuba, Graduate School of Life and Environmental Sciences, Professor	Analysis of entire physiological roles of mammalian mtDNA by generation of mice carrying various pathogenic mutations	FY2007-2011	85,100
Takami Yamaguchi	Tohoku University, Graduate School of Biomedical Engineering, Professor	Computational Nanobiomechanics for the diagnosis, treatment, and prevention of diseases of blood, circulatory, and digestive organs	FY2007-2011	90,100
Yoshinobu Ohira	Osaka University, Graduate School of Medicine, Professor	Promotion of muscle activities as the countermeasure for prevention of the deterioration of brain function	FY2007-2011	89,500
Sakuji Yoshimura	Waseda University, Faculty of Science and Engineering, Professor	THE MEMPHITE NECROPOLIS, EGYPT SITE MANAGEMENT PLAN PROJECT	FY2007-2011	82,200
Yoshihiko Nakamura	The University of Tokyo, Graduate School of Information Science and Technology, Professor	ESTABLISHING HUMAN-MACHINE COMMUNICATION THROUGH KINESIOLOGY AND LINGUISTICS INTEGRATION	FY2008-2012	156,200
Hiroshi Ishiguro	Osaka University, Graduate School of Engineering Science, Professor	Studies on humanlike presence by using tele-operated androids	FY2008-2012	161,700

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Kazuo Fujita	Kyoto University, Graduate School of Letters, Professor	Awareness, self-reflection, and mind-reading: Genesis and functions of cognitive meta-processes.	FY2008-2012	143,300
Toshio Inui	Kyoto University, Graduate School of Informatics, Professor	Brain mechanisms of dynamic image generation based on body schema	FY2008-2012	162,000
Kuniyoshi Sakai	The University of Tokyo, Graduate School of Arts and Sciences, Associate Professor	The Elucidation of Sign Language Acquisition Mechanism Based on the Linguistic Function of the Brain	FY2008-2012	113,100
Masahiko Takada	Kyoto University, Primate Research Institute, Professor	Analyses of architecture and functions of cerebral networks by target neuron-selective activity suppression and tract-tracing approaches	FY2008-2012	127,700
Katsuhiko Mikoshiba	RIKEN, Brain Science Institute, Group Director	Study of IP3 receptor/Ca2+ signaling in neural plasticity and brain development and differentiation	FY2008-2012	159,700
Harunori Ohmori	Kyoto University, Graduate School of Medicine, Professor	Neuronal identification by fluorescence spectrogram, and the application to auditory neural circuits in vivo	FY2008-2012	127,100
Yoichiro Iwakura	The University of Tokyo, The Institute of Medical Science, Professor	Establishment of a IL-1-related gene manipulated mouse library to understand diseases from a systems biological view point	FY2008-2011	78,100
Yasuhiko Tabata	Kyoto University, Institute for Frontier Medical Sciences, Professor	Development of Technology to Manipulate the Biological Functions of Stem cells for Cell therapy of Next Generation	FY2008-2012	129,400
Nobuyuki Kamba	National Institutes for Cultural Heritage Tokyo National Museum, Curatorial Research Department, Supervisor of Conservation	Study on a Primary Conservation System for Sustainable Access and Preservation of the Cultural Heritage in Museums	FY2008-2012	76,200
Kei Hiraki	The University of Tokyo, Graduate school of Information Science and Technology, Professor	Highly productive software environment based on Ruby for parallel and distributed computing systems	FY2009-2013	166,600
Shojiro Nishio	Osaka University, Graduate School of Information Science and Technology, Trustee and Vice President	Studies on Efficient Data Processing Techniques for Mobile Sensor Networks	FY2009-2013	121,000
Yasushi Yagi	Osaka University, The Institute of Scientific and Industrial Research, Professor	Ambient Surveillance using a Wearable Lenseless Omnidirectional Sensor - Prevention of Crimes against Children -	FY2009-2013	158,900
Masayuki Inaba	The University of Tokyo, Graduate School of Information Science and Technology, Professor	Developmental Approach in Configuring Body and Behavior of Life-size Humanoids with Whole-body Passivity and Attention Inductivity	FY2009-2013	189,200
Norihiro Sadato	National Institute for Physiological Sciences, Division of Cerebral Integration, Professor	Elucidating the Neural Basis and Development of Prosocial Behavior	FY2009-2013	164,800
Masanobu Kano	The University of Tokyo, Graduate school of Medicine, Professor	Research on the roles of endocannabinoid-mediated retrograde synaptic transmission in physiology and pathophysiology of the brain	FY2009-2013	161,800
Tsutomu Nakada	University of Niigata, Brain Research Institute, Professor	Magnetic Resonance Molecular Microimaging	FY2009-2013	164,400
Shigeo Okabe	The University of Tokyo, Graduate School of Medicine, Professor	Molecular Anatomy of Synaptic Structure	FY2009-2013	109,500
Satoru Takahashi	University of Tsukuba, Graduate School of Comprehensive Human Sciences, Professor	Development of basic technologies for new in vivo imaging to promote life science research	FY2009-2013	144,200
Kenichi Yamamura	Kumamoto University, Institute of Resource Development and Analysis, Professor	Genetic studies on unique phenotypes in MSM/Ms mouse strain	FY2009-2013	162,000
Joji Ando	Dokkyo Medical University, School of Medicine, Professor	Molecular Biomechanics of Vascular Cell Mechano-Responses	FY2009-2013	156,400

○ New multidisciplinary fields (39 Projects)

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Ryuji Tada	The University of Tokyo, Graduate School of Science, Professor	Paleoceanography for future prediction: Possibility of climatic mode jump in response to global warming	FY2006-2010	84,000
Kenshi Komatsu	Kyoto University, Radiation Biology Center, Professor	Induction of DNA double strand break by environmental genotoxic and carcinogenic agents	FY2006-2010	83,600
Tomonari Matsuda	Kyoto University, Graduate School of Engineering, Associate Professor	Identification of new DNA damages by DNA adductome analysis	FY2006-2010	74,800
Toyohiko Kinoshita	Japan Synchrotron Radiation Research Institute, Research & Utilization Division, Chief Scientist	Observation of high-speed magnetic dynamics by time-resolved photoemission electron microscopy	FY2006-2010	84,500
Tomokazu Iyoda	Tokyo Institute of Technology, Chemical Resources Laboratory, Professor	Simultaneous Dynamic Measurement of Transcription and formation processes of Ultra-anisotropic Cylinder Nanostructures	FY2006-2010	84,500
Koichi Kawakami	National Institute of Genetics, Department of Developmental Genetics, Professor	Studies on vertebrate development by the transposon-mediated Gal4 enhancer trap method in zebrafish	FY2006-2010	79,200
Youji Sakagami	Nagoya University, Graduate School of Bioagricultural Sciences, Professor	Studies of Bioorganicchemistry on Microbial and Plant Peptide Factors	FY2006-2010	82,700
Michio Murata	Osaka University, Graduate School of Science, Professor	Structures and Functions of Membrane-bound Biomolecules	FY2006-2010	85,100
Yutaka Kondo	The University of Tokyo, Research Center for Advanced Science and Technology, Professor	Studies on impacts of black carbon aerosol based on aircraft observations	FY2007-2011	85,100
Takeshi Todo	Osaka University, Graduate School of Medicine, Professor	Screening for Induced Point Mutations in Medaka with TILLING	FY2007-2011	82,800
Akira Naganuma	Tohoku University, Graduate School of Pharmaceutical Sciences, Professor	Cellular Systems Involved in Development and Regulation of Toxicity of Methylmercury	FY2007-2011	84,400
Kunio Takayanagi	Tokyo Institute of Technology, Graduate School of Science and Engineering, Professor	Angle Resolved Spectroscopic Observation of Electron Beam induced Radiation from Nano-Structures excited by Low-Energy Electron Nanoprobe	FY2007-2011	80,900
Masayoshi Esashi	Tohoku University, Advanced Institute for Materials Research, Professor	Study of massive parallel direct electron beam delineation systems	FY2007-2011	84,800
Koji Ishibashi	RIKEN, Advanced Device Laboratory, Chief Researcher	Study on interaction between carbon nanotube quantum dots and electromagnetic wave	FY2007-2011	72,600
Yoshiaki Kawata	Kansai University, Faculty of Safety Science, Professor	Catastrophic Compound Disasters and Their Disaster Reduction Strategy	FY2007-2011	72,800
Hidetoshi Inoko	Tokai University, School of Medicine, Professor	Genome-wide identification of genes for anorexia and their cascade analysis on disease development by functional study	FY2007-2011	84,300
Junji Takabayashi	Kyoto University, Center for Ecological Research, Professor	Induced indirect defense of plants against herbivores and its application in pest control	FY2007-2011	84,600
Mitsuaki Nishibuchi	Kyoto University, Center for Southeast Asian Studies, Professor	Infectious diseases spreading across international borders in Southeast Asia: elucidation of area-specific features based on multifactorial analysis	FY2007-2011	83,600
Keiichiro Ohshima	Hokkaido University, Institute of Low Temperature Science, Professor	Global mapping and monitoring of sea ice production	FY2008-2012	162,400
Ichiro Yasuda	The University of Tokyo, Atmosphere and Ocean Research Institute, Professor	Direct observations of tidal mixing and studies on ocean/climate variability synchronized with 18.6-year period nodal tidal cycle	FY2008-2012	163,700
Shinsuke Tanabe	Ehime University, Center for Marine Environmental Studies, Professor	Environmental Contamination and Ecological Risk of Novel POPs in the Asian Developing Region	FY2008-2012	125,100

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Yasuhiro Sugawara	Osaka University, Graduate School of Engineering, Professor	Investigation of Mechanical Manipulation of Atoms and Molecules on Insulator Surfaces with Extreme Field Atomic Force Microscopy	FY2008-2012	70,900
Kohzo Ito	The University of Tokyo, Graduate School of Frontier Sciences, Professor	Dynamic Control of Slide-Ring Materials	FY2008-2012	155,900
Toshio Ando	Kanazawa University, School of Mathematics and Physics, Professor	Innovative High-speed AFM for Elucidating Vital Phenomena	FY2008-2012	149,800
Hideaki Takayanagi	Tokyo University of Science, Research Institute for Science and Technology, Professor	Development of a nano-SQUID and its application to quantum information	FY2008-2012	160,100
Haruhiko Siomi	Keio University, School of Medicine, Professor	Fathoming the evolution of gene regulation through an 'arms race' between transposons and Argonautes	FY2008-2012	164,100
Hiroyuki Aburatani	The University of Tokyo, Research Center for Advanced Science and Technology, Professor	Integrated analysis of transcriptional regulation in cancer	FY2008-2012	161,400
Takao Hamakubo	The University of Tokyo, Research Center for Advanced Science and Technology, Professor	Dynamic Proteomics of Transcriptional Machinery and Nuclear Architecture	FY2008-2012	151,600
Yoshizumi Kajii	Tokyo metropolitan University, Graduate School of Urban Environmental Sciences, Professor	Diagnosis of urban air quality by laser spectroscopy and the controlling strategy for oxidant formation	FY2009-2013	160,000
Hideaki Motoyama	National Institute of Polar Research, Division of Research and Education, Professor	Study on the global environmental change with the various time scales by the various analysis of ice cores	FY2009-2013	162,100
Hiroshi Mitani	The University of Tokyo, Graduate School of Frontier Sciences, Professor	Visualization of radiation induced mutagenesis in vivo	FY2009-2013	76,300
Hisato Iwata	Ehime University, Center for Marine Environmental Studies, Professor	Clarification of factors governing sensitivity of disruption of intracellular receptor-xenobiotic metabolizing enzyme signaling pathways by chemical substances	FY2009-2013	168,900
Nobuo Tanaka	Nagoya University, EcoTopia Science Institute, Professor	Development of the spin polarization pulsed EM, and application to nano-spin analysis	FY2009-2013	160,200
Masataka Kinjo	Hokkaido University, Faculty of Advanced Life Science, Professor	Study of molecular interaction of molecular complexes in live cell using multipoint temporal and spatial correlation spectroscopy analysis.	FY2009-2013	135,900
Yukihiro Terada	Kochi National College of Technology, Department of Environmental Civil Engineering and Architecture, Professor	A development of Innovative Disaster Prevention System using GPS Buoy with Sea and Submarine Observation Equipments	FY2009-2013	163,600
Kunio Shiota	The University of Tokyo, Graduate School of Agricultural and Life Sciences, Professor	Analysis of Sex-dependent Epigenome	FY2009-2013	160,300
Daisuke Uemura	Keio University, Faculty of Science and Technology, Professor	Chemistry of Novel Naturally Occurring Super-carbon-chain Molecules	FY2009-2013	139,900
Tsukasa Mizushima	The University of Tokyo, Graduate School of Humanities and Sociology, Professor	Long-term Trends of Indian Villages	FY2009-2013	128,200
Yoshihito Shimada	Nagoya University, Graduate School of Letters, Professor	Historico-Ecological Studies of Afro-Eurasian Inner Dry Land Civilizations and Their Modern Changes from the Viewpoint of Pastoralism	FY2009-2013	153,900

Humanities and Social Sciences (22 Projects)

○ Humanities (11 Projects)

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Tetsuo Nishio	National Museum of Ethnology, Department of Cultural Research, Professor	Studies on the history of the Arabian Nights and its influence upon the literary genesis of Orientalism	FY2006-2010	61,800
Nobuyuki Yoshida	The University of Tokyo, Graduate School of Humanities and Sociology, Professor	Comparative Studies of the Segmental Socio-Spatial Structures in Traditional Cities, 1500-1900	FY2006-2010	82,600
Itaru Tomiya	Kyoto university, Institute for research in Humanities, Professor	Ceremony and Punishment in East Asia—inter-disciplinary research of ritual order and legal order	FY2006-2010	64,800
Yoshifumi Ikeda	University of the Ryukyus, Faculty of Law and Letters, Professor	Grasping and Analyzing Mongolian-Expedition-Related Archeological Sites and Remains on the Seabed of Takashima(Kitamatsuura-county, Nagasaki Prefecture, Japan)	FY2006-2010	80,000
Hikomitsu Ogawa	The University of Tokyo, Institute for Advanced Studies on Asia, Professor	Research on Pursuit and Formation of Cultural and National Identity Constructed in Figurative Arts—from the Entire Region of Asia to the Whole World	FY2007-2011	82,200
Ichiro Touyama	Aichi Prefectural University, School of Japanese Studies, Professor	Study of Literature and Culture Related With War Affairs	FY2007-2011	62,500
Yuzuru Hayashi	The University of Tokyo, Historiographical Institute, Professor	A Study of Constructing of the Historical Ontology with Digitizing of Historical Materials	FY2008-2012	151,900
Akihiro Watanabe	National Institutes for Cultural Heritage Nara National Research Institute for Cultural Properties, Department of Imperial Palace Sites Investigations, Head of History Section	The improvement of the Support system to decode excavated historical documents and the development of the comprehensive research center database	FY2008-2012	104,000
Masashi Haneda	The University of Tokyo, Institute for Advanced Studies on Asia, Director	Eurasia in the Modern Period: Towards a New World History	FY2009-2013	94,600
Hiroshi Okumura	Kobe University, Graduate school of Humanities, Professor	Creation of Local Historical Document Studies based on theory of Historical Materials Preservation at the time of large-scale natural disasters	FY2009-2013	85,500
Yukio Himiyama	Hokkaido University of Education, Faculty of Education, Professor	Towards Sustainable Land Use in Asia	FY2009-2013	70,700

○ Social sciences (11 Projects)

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Kazumi Asako	Hitotsubashi University, Institute of Economic Research, Professor	Synthetic Studies on Business Cycle and Economic Growth-Construction of Business Cycle Models and Empirical Analyses of Japanese Economy	FY2006-2010	83,400
Hitoshi Hirakawa	Nagoya University, Graduate School of Economics, Professor	Studies on Industrial Agglomeration and Corporate Linkage in East Asia and Symbiotic Sustainability	FY2006-2010	89,200
Jiro Yamaguchi	Hokkaido University, Graduate School of Law, Professor	Comprehensive research on ideas and policy of civil social democracy	FY2007-2011	75,800
Makoto Yano	Kyoto University, Institute of Economic Research, Professor	Globalization and the Japanese Economy – People, Goods, Money, and Social Overhead Capital –	FY2007-2011	60,000
Yoshitaka Nakajima	Kyushu University, Graduate School of DESIGN, Professor	Temporal continuity and phonological discontinuity in linguistic communication: Collaboration between perceptual psychology, linguistics, and speech science	FY2007-2011	51,400
Akira Okada	Hitotsubashi University, Department of Economics, Professor	Frontiers of Game Theory: Theory and Applications	FY2008-2012	139,600
Hiroyuki Chuma	Hitotsubashi University, Institute of Innovation Research, Professor	Joint Research on Innovation Processes among Industry, Universities and Government	FY2008-2012	109,200

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Akira Kohsaka	Osaka University, School of International Public Policy, Professor	Spill-Over and Cycle Effects of Regional Integration: Growth and Cycles of Asia and Enlarged EU	FY2008-2011	68,200
Sawako Shirahase	The University of Tokyo, Graduate School of Humanities and Sociology, Associate Professor	A Comprehensive Study Examining the Forms of Social Stratification in an Aging Society and Constructing Public Norms	FY2008-2012	129,400
Kenichi Ikeda	The University of Tokyo, Graduate School of Humanities and Sociology, Professor	Comparative research project on values, trust, participation and democracy in Japan	FY2009-2013	96,200
Juko Ando	Keio University, Faculty of Letters, Professor	A Twin Study on Sociability and Mental Health: A Bridge between Genes and Brain Activities	FY2009-2011	163,300

Science and Engineering (135 Projects)

○ Mathematical and physical sciences (42 Projects)

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Kenji Fukaya	Kyoto University, Graduate school of Science, Professor	Developments of Geometry by topological Field theory	FY2006-2010	63,200
Masayasu Mimura	Meiji University, School of Science and Technology, Professor	Mathematical Theory of Nonlinear-Non-equilibrium Reaction-Diffusion Systems	FY2006-2010	54,200
Masayuki Fujimoto	Hokkaido University, Graduate School of Science, Professor	A Study on the First Stars in our Universe as a Probe into its Early History	FY2006-2010	78,800
Kazuo Makishima	The University of Tokyo, Graduate School of Science, Professor	Investigation of Interactions between Galaxies and Inter-Galactic Plasmas	FY2006-2010	79,000
Akira Ukawa	University of Tsukuba, Graduate School of Pure and Applied Sciences, Professor	Computational particle physics with massively parallel cluster PACS-CS	FY2006-2010	70,600
Junichi Matsuda	Osaka University, Graduate School of Science, Professor	The origin of the major carrier of noble gases in meteorites and its cosmo-geochemical implications	FY2006-2010	76,000
Toshiyuki Katsura	Hosei University, Faculty of Science and Engineering, Professor	Study on Algebraic Varieties related to moduli spaces and algebraic cycles	FY2007-2011	70,900
Masahiko Saito	Kobe University, Graduate School of Science, Professor	New Developments and Interaction between Algebraic Geometry and Integrable Systems	FY2007-2011	76,300
Hideyo Kunieda	Nagoya University, Graduate school of Science, Professor	Balloon borne hard X-ray imaging observations of active galactic nuclei and cluster of galaxies	FY2007-2011	81,500
Masanori Iye	National Astronomical Observatory, Optical and Infrared Astronomy Division, Professor	Unraveling galaxy formation history using laser guide star adaptive optics system	FY2007-2011	100,400
Takaaki Kajita	The University of Tokyo, Institute for Cosmic Ray Research, Professor	High sensitivity search for $\nu \mu$ to νe oscillations	FY2007-2011	79,400
Katsuhiko Sato	The University of Tokyo, Professors emeritus	Quest for the unified picture of the explosion mechanism of supernovae and the central engine of gamma-ray bursts	FY2007-2011	66,800
Seigo Tarucha	The University of Tokyo, Graduate School of Engineering, Professor	Detection and manipulation of quantum coherence in quantum dots and wires	FY2007-2011	77,200
Hidenori Takagi	The University of Tokyo, Graduate School of Frontier Sciences, Professor	Electric Field Induced Phase Changes in Transition Metal Oxides	FY2007-2011	84,800
Katsuya Shimizu	Osaka University, Center for Quantum Science and Technology under Extreme Conditions, Professor	Superconductivity in elements under very high pressure	FY2007-2011	97,100

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Toshiyuki Azuma	RIKEN, Atomic, Molecular & Optical Physics Laboratory, Chief Scientist	Atomic physics with resonant coherent excitation by crystal field	FY2007-2011	83,600
Hitoshi Kawakatsu	The University of Tokyo, The Earthquake Research Institute, Professor	NECESSArray Project – Earth dynamics viewed from the Chinese continent	FY2007-2011	97,600
Akira Tsuchiyama	Osaka University, Graduate School of Science, Professor	Importance of amorphous silicates as source material of the solid planets and its initial evolution	FY2007-2011	81,600
Mitsuhiro Nakao	Sasebo National College of Technology, President	Development of computer assisted analysis for complicated nonlinear phenomena	FY2008-2011	65,300
Hideo Kozono	Tohoku University, Graduate School of Science, Professor	Theory of global well-posedness on the nonlinear partial differential equations	FY2008-2012	136,800
Masayuki Umemura	University of Tsukuba, Graduate School of Pure and Applied Sciences, Professor	Probing the Dark Age: From First Generation Objects to Primordial Galaxies	FY2008-2012	73,100
Ken Takayama	High Energy Accelerator Research Organization, Accelerator Laboratory, Professor	Digital Accelerator based on the Induction Acceleration Method	FY2008-2010	166,700
Yasuo Miake	University of Tsukuba, Graduate School of Pure and Applied Sciences, Professor	Study of Jets in Quark Gluon Plasma with Parton Identification	FY2008-2012	65,400
Hiroshi Daimon	Nara Institute of Science and Technology, Graduate School of Materials Science, Professor	Small-area two-dimensional photoelectron spectroscopy	FY2008-2012	132,200
Yuji Matsuda	Kyoto University, Graduate School of Science, Professor	Exotic Superconducting State of Heavy Fermion Compounds	FY2008-2012	165,200
Noriaki Sato	Nagoya University, Graduate School of Science, Professor	Investigation of novel quantum states in actinide-based compounds with unstable valence	FY2008-2012	149,900
Tanio Ito	Chiba University, Graduate School of Science, Professor	Research on active tectonics in central Japan based on integrated seismic experiments with long shot- and receiver-offsets	FY2008-2010	147,600
Yukio Isozaki	The University of Tokyo, Graduate School of Arts and Sciences, Professor	Study on Mass Extinction: The P-T boundary and V-C boundary events	FY2008-2012	102,900
Yoshikazu Giga	The University of Tokyo, Graduate School of Mathematical Sciences, Professor	Development of Analysis on Evolving Pattern for Complicated Phenomena	FY2009-2013	134,500
Satoshi Yamamoto	The University of Tokyo, Graduate School of Science, Professor	Exploring Chemical Evolution from Star Forming Cores to Protoplanetary Disks by Multi-Wavelength Line Survey	FY2009-2013	131,200
Takaya Ohashi	Tokyo Metropolitan University, Graduate School of Science and Engineering, Professor	Development of multi-pixel microcalorimeters aiming for small scientific satellites	FY2009-2013	86,700
Masayuki Nakahata	The University of Tokyo, Institute for Cosmic Ray Research, Professor	Search for Supernova Relic Neutrinos	FY2009-2013	159,900
Toru Tanimori	Kyoto University, Graduate school of Science, Professor	Observation of Galactic Gamma-ray Sources using Electron Tracking Compton Camera with Balloon borne Experiment	FY2009-2013	161,500
Shoji Torii	Waseda University, Faculty of Science and Engineering, Professor	Search for dark matter and cosmic-ray nearby – sources by observing high energy electrons and positrons	FY2009-2013	161,400
Yasuhiro Masuda	High Energy Accelerator Research Organization, Institute of Particle and Nuclear Studies, Associate Professor	Time reversal symmetry violation test with new generation ultracold neutrons	FY2009-2013	158,500
Youichi Murakami	High Energy Accelerator Research Organization, Institute of Materials Structure Science, Professor	Study of Local Electronic State and the Hybridized Orbital Order under Magnetic Field and Pressure by Resonant Soft X-ray and Neutron Scattering	FY2009-2013	168,900

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Yoshihiro Iwasa	The University of Tokyo, Graduate School of Engineering, Professor	Electronic Phase Control of Matter Using Ultra-high Electric Field at Electrochemical Interfaces	FY2009-2013	168,500
Keiya Shirahama	Keio University, Faculty of Science and Technology, Professor	Nanoscale Helium Physics and its Applications	FY2009-2013	168,000
Hajime Tanaka	The University of Tokyo, Institute of Industrial Science, Professor	Hierarchical Self-Organization and Dynamics of Liquids	FY2009-2013	151,800
Hiroshi Ogasawara	Ritsumeikan University, School of Science and Engineering, Professor	Multidisciplinary monitoring of preparation and generation of earthquakes at M2 sources in South African gold mines	FY2009-2013	148,400
Takafumi Hirata	Kyoto University, Graduate School of Science, Professor	High-pressure Experimental Geochemistry : Elemental Distribution of Trace-siderophile Elements within the Earth's Core	FY2009-2013	144,200
Sanae Itoh	Kyushu University, Research Institute of Applied Mechanics, Professor	Integrated Research on Dynamic Response and Transport in Turbulent Plasmas	FY2009-2013	163,900

O Chemistry (23 Projects)

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Kazuo Takatsuka	The University of Tokyo, Graduate School of Arts and Sciences, Professor	Theory of Chemistry beyond the Born-Oppenheimer concept	FY2006-2010	85,400
Hiroharu Suzuki	Tokyo Institute of Technology, Graduate School of Science and Engineering, Professor	Reaction Chemistry of Transition metal Clusters	FY2006-2010	88,100
Shinzaburo Ito	Kyoto University, Graduate School of Engineering, Professor	New developments in polymer science through polymer chain imaging:empirical foundation research using scanning near-field optical microscopy	FY2006-2010	91,400
Kazuhiko Nakatani	Osaka University, The Institute of Scientific and Industrial Research, Professor	Functional Control by Modulating the Nucleic Acid Structure Based on Mismatch Base Pair Stabilization	FY2006-2010	87,000
Tetsuo Asakura	Tokyo University of Agriculture and Technology, The Graduate School of Engineering, Professor	Development of Techniques for Improvement of Silk Structure, Establishment of Mass Production, and Application to New Silk-based Materials for Bone and Teeth Regeneration	FY2006-2010	86,300
Akira Sekiguchi	University of Tsukuba, Graduate School of Pure and Applied Sciences, Professor	Research on the Low-Coordinate and Multiply-Bonded Compounds of Heavier Main Group Elements	FY2007-2011	85,900
Tamio Hayashi	Kyoto University, Graduate School of Science, Professor	Advanced Control of Catalytic Activity and Stereoselectivity in Catalytic Asymmetric Reactions	FY2007-2010	85,100
Hiroyuki Nishide	Waseda University, Faculty of Science and Engineering, Professor	SOMO Design of Radical Polymers for Development of Fully Organic Rechargeable Batteries	FY2007-2011	77,600
Yoshihito Watanabe	Nagoya University, Research Center for Materials Science, Professor	Molecular Design of Oxygenases Applicable to Synthetic Chemistry	FY2007-2011	85,500
Kaname Kanai	Tokyo University of Science, Faculty of Science and Technology, Associate Professor	Structure and Electronic Structure of Organic Interfaces:From Well-defined Ideal Interfaces to Real Devices	FY2007-2011	79,300
Masahiko Takahashi	Tohoku University, Institute of Multidisciplinary Research for Advanced Materials, Professor	Visualization of electron transfer in matter with a time-resolved reaction microscope for electron Compton scattering	FY2008-2012	118,400
Kenso Soai	Tokyo University of Science, Faculty of Sciences, Professor	The Origins of Chirality and Amplification in Asymmetric Autocatalysis	FY2008-2012	159,200
Masahiro Yamashita	Tohoku University, Graduate School of Science, Professor	Switching Phenomena in Super-Paramagnets Controlled by External Stimuli	FY2008-2012	164,400
Nobuaki Kambe	Osaka University, Graduate School of Engineering, Professor	Development and Control of Highly Efficient Catalytic Systems for Cross- and Multicomponent-Coupling Reactions	FY2008-2012	122,700

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Kazuo Akagi	Kyoto University, Graduate School of Engineering, Professor	Synthesis of Conjugated Polymers with Higher-Ordered Helical Structures in Helicity-Controllable Liquid Crystal Field and Their Functional Properties	FY2008-2012	151,400
Eiji Yashima	Nagoya University, Graduate School of Engineering, Professor	Development of Materials with Novel Properties and Functions Based on Controlled Double-Stranded Helical Structure	FY2008-2012	88,900
Maki Kawai	The University of Tokyo, Graduate School of Frontier Sciences, Professor	Single Molecule Spectroscopy using Probe Microscope	FY2009-2013	156,600
Shu Kobayashi	The University of Tokyo, Graduate School of Science, Professor	The New World of Organic Chemistry Using Water as a Solvent	FY2009-2013	166,000
Mitsuhiro Shionoya	The University of Tokyo, Graduate School of Science, Professor	Creation of Supramolecular Complex Systems based on Dynamic Chemistry	FY2009-2013	166,000
Zhaomin Hou	RIKEN, Advanced Science Institute, Chief Scientist	Development of Novel Catalysts Based on Organo Rare Earth Metal Complexes	FY2009-2013	163,600
Tamejiro Hiyama	Chuo University, Research and Development Initiative, Professor	Activation and Synthetic Transformation of Stable Chemical Bonds by Cooperative Metal Catalysis	FY2009-2013	164,100
Tomiki Ikeda	Tokyo Institute of Technology, Chemical Resources Laboratory, Professor	Construction of High-Performance Photomobile Polymer Materials by Means of Interfacial Control	FY2009-2013	163,300
Hiroyuki Ohno	Tokyo University of Agriculture and Technology, The Graduate School of Engineering, Professor	Development of Ionic Liquids for Bioscience	FY2009-2013	145,600

○ Engineering (70 Projects)

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Yoshikazu Takeda	Nagoya University, Graduate School of Engineering, Professor	Intrinsic Hetero-interface Structures and Their Formation	FY2006-2010	89,400
Hiroshi Masuhara	Nara Institute of Science and Technology, Graduate School of Materials Science, Professor	Photon Pressure Chemistry of Crystallization and Molecular Arrangement Control in Crystals	FY2006-2010	85,800
Masumi Saka	Tohoku University, Graduate School of Engineering, Professor	Formation of Metallic Nanomaterials by Controlled Atomic Accumulation and their Characterizations	FY2006-2010	74,800
Toshio Miyauchi	Tokyo Institute of Technology, Graduate School of Science and Engineering, Professor	A Study on Turbulent Stratified/Multiphase Combustion by High Resolution Combined Laser Diagnostics and Large-Scale GIRD DNS	FY2006-2010	79,000
Mamoru Mitsuishi	The University of Tokyo, Graduate School of Engineering, Professor	A Medical CAD/CAM System for Minimally Invasive Surgery using a Compact Surgical Robot	FY2006-2010	87,500
Taiichi Otsuji	Tohoku University, Research Institute of Electrical Communication, Professor	Exploring Novel Electromagnetic Circuit Based on Management of Low-Dimensional Plasmonic Dispersion	FY2006-2010	86,700
Masaaki Tanaka	The University of Tokyo, Graduate School of Engineering, Professor	Reconfigurable Nano-spin Devices	FY2006-2010	77,900
Motoyuki Sato	Tohoku University, Center for Northeast Asian Studies, Professor	Radar technology for humanitarian demining and its application	FY2006-2010	86,100
Kiyoshi Toko	Kyushu University, Faculty of Information Science and Electrical Engineering, Professor	Development of Kansei Biosensor	FY2006-2010	86,800
Chitoshi Miki	Tokyo Institute of Technology, Graduate School of Science and Engineering, Professor	Establishment of steel bridge resuscitative engineering to recover and improve the function of steel bridges with serious fatigue damage	FY2006-2010	73,300
Yasuhiro Iwasawa	The University of Electro Communications, Graduate School of Informatics and Engineering, Professor	Study on developments of highly efficient selective oxidation and fuel cell oxidation catalysts and their real-time structure analyses	FY2006-2010	85,300

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Nobuo Takeda	The University of Tokyo, Graduate School of Frontier Sciences, Professor	Optical fiber sensor monitoring system of composite structures for damage tolerance design	FY2006–2010	79,400
Hiroshi Azechi	Osaka University, Institute of Laser Engineering, Professor	Concept Exploration of Impact Fast Ignition	FY2006–2010	86,900
Hirofumi Yamada	Kyoto University, Graduate School of Engineering, Associate Professor	Proximal multi-probe measurement and control method for nanometer-scale structures based on frequency modulation AFM	FY2007–2011	76,100
Daisuke Shindo	Tohoku University, Institute of Multidisciplinary Research for Advanced Materials, Professor	Development of electron holography system for photoexcitation phenomena and its applications to materials science	FY2007–2011	90,400
Masayuki Nakao	The University of Tokyo, Graduate School of Engineering, Professor	Molding multi-layered precise structures widely and seamlessly	FY2007–2011	85,000
Yuji Nagasaka	Keio University, Faculty of Science and Technology, Professor	Development of Innovative Nano-Micro Level Thermophysical Properties Sensing Techniques and Their Applications	FY2007–2011	94,300
Akira Toriumi	The University of Tokyo, Graduate School of Engineering, Professor	Understanding and Control of Electronic Properties of Nanometer-thick Dielectric Films	FY2007–2011	79,100
Hiroshi Kawarada	Waseda University, Faculty of Science and Engineering, Professor	Development of High Power and Millimeter-long Wave Diamond Transistors Using Two Dimensional Hole Gas	FY2007–2011	84,700
Kazuhiro Hane	Tohoku University, Graduate School of Engineering, Professor	Study of optical micro systems by monolithic integration of silicon with nitride semiconductor	FY2007–2011	83,700
Taikan Oki	The University of Tokyo, Institute of Industrial Science, Professor	Developing an Integrated Water Cycle Model for Sustainability Assessment of World Water Resources	FY2007–2011	77,800
Tatsuo Omura	Tohoku University, Graduate School of Engineering, Professor	Development of virus-binding protein-based technologies for concentration, detection and identification of pathogenic viruses in water environment	FY2007–2011	85,600
Yoshiyuki Suzuki	Ritsumeikan University, Ritsumeikan Global Innovation Research Organization, Professor	Study on Development of Design Method for Traditional Wooden Buildings Based on Structural Details	FY2007–2011	75,000
Takeshi Nakagawa	Waseda University, Faculty of Science and Engineering, Professor	Reconstruction of the historical environment on Complex of Hue monuments –The reappearance made by CG technology and the establishment of GIS–	FY2007–2011	84,600
Kiyohito Ishida	Tohoku University, Graduate School of Engineering, Professor	New Functional Co-base Alloys – Phase Stability and Its Industrial Applications –	FY2007–2011	85,000
Sadahiro Tsurekawa	Kumamoto University, Graduate School of Science and technology, Professor	Innovation in Electromagnetic Science of Materials and Its Application to Practical Materials Processing	FY2007–2011	81,200
Shinya Matsuo	Osaka University, Graduate School of Engineering, Professor	High Speed Reaction Field of Stable/Metastable Bulks Mixed in Nano-Scale and Its Applications	FY2007–2011	80,600
Takashi Tatsumi	Tokyo Institute of Technology, Chemical Resources Laboratory, Professor	Creation and diversification of novel porous materials with controllable nanopores and sophisticated molecular recognition functions	FY2007–2011	86,000
Takeshi Kinoshita	The University of Tokyo, Institute of Industrial Science, Professor	Study on forecast and evading of Freak wave	FY2007–2011	74,600
Masayoshi Kawai	High Energy Accelerator Research Organization, Professors emeritus	Comprehensive study on material damage mechanism by experimental and theoretical methods and development of materials for high-energy quantum-beam fields	FY2007–2010	85,800
Kazuo Nakajima	Tohoku University, Institute for Materials Research, Professor	Investigation of crystal growth mechanisms of Si crystals floating on Si melt and development of crystal growth technique to realize high-quality Si multicrystals	FY2008–2010	114,700

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Susumu Noda	Kyoto University, Graduate School of Engineering, Professor	Dynamic control of photonic crystal for new functionality	FY2008-2012	160,100
Yasuo Kokubun	Yokohama National University, Graduate School of Engineering, Professor	Semiconductor microring processor using wavelength channel control	FY2008-2012	138,700
Hiroyuki Hama	Tohoku University, Research Center for Electron Photon Science, Professor	Study and Development of Extremely Short Pulse Coherent Terahertz Light Source Employing an Electron Isochronous Ring	FY2008-2012	159,300
Yoji Shibutani	Osaka University, Graduate School of Engineering, Professor	Plastic Physics of Defect Mechanics	FY2008-2012	89,700
Akira Miyamoto	Tohoku University, New Industry Creation Hatchery Center, Professor	Development of Multi-level Tribological Simulator based on Ultra-accelerated Quantum Chemical Molecular Dynamics	FY2008-2012	153,600
Ichiro Hagiwara	Tokyo Institute of Technology, Graduate School of Science and Engineering, Professor	Research on Creating Function of New Lightweight Core Structure and Its Forming Method by Fusion of Computational Mechanics and Origami Engineering	FY2008-2012	151,700
Kouhei Ohnishi	Keio University, Science and Tehcnology, Professor	Research and Development on Platform of Science and Engineering for Human Support Based on Real-World Haptics	FY2008-2012	114,300
Yoshiaki Nakano	The University of Tokyo, Research Center for Advanced Science and Tehcnology, Professor	Digital Photonics -Paradigm Shift of Optoelectronics	FY2008-2012	122,900
Kazuo Nakazato	Nagoya University, Graduate School of Engineering, Professor	BioCMOS technology and its application to portable biosensor instruments	FY2008-2012	75,700
Makoto Ishida	Toyohashi University of Technology, Graduate School of Engineering, Professor	An implantable chip with integrated microprobe/tube arrays for electrical neural recording, stimulation, and drug delivery applications	FY2008-2012	161,900
Yozo Fujino	The University of Tokyo, Graduate School of Engineering, Professor	Prediction of Ultimate Performance of Civil Infrastructure using Dense Vibration Monitoring	FY2008-2012	75,100
Juko Ito	Kumamoto University, Graduate School of Science and Technology, Professor	Interdisciplinary Research on Architecture and Urban Environment of Ancient Greek Cities of Messene and Phigalia	FY2008-2012	92,800
Akihisa Inoue	Tohoku University, President	Fabrication and Industrialization of Large-Sized Bulk Metallic Glasses of Centimeter-Size Class	FY2008-2012	157,600
Jin Onuki	Ibaraki University, College of Engineering, Professor	Nano-scale Structural Control of Cu interconnects Using An Extreme High-purity Electro-plating Process and Its Application to Next Generation Nano-scale ULSI	FY2008-2012	161,300
Tadafumi Ajiri	Tohoku University, Advanced Institute for Materials Research, Professor	Synthesis of organic-inorganic hybrid nanoparticles by supercritical fluid and thermodynamics and unit operation of hybrid nanoparticles	FY2008-2012	152,500
Atsushi Fukuoka	Hokkaido University, Catalysis Research Center, Professor	Synthesis of Fuels and Chemicals by Catalytic Conversion of Inedible Biomass	FY2008-2012	143,700
Atsushi Fukuyama	Kyoto University, Graduate School of Engineering, Professor	Development of Kinetic Integrated Simulation Code for Toroidal Plasmas	FY2008-2012	75,800
Hiroshi Yamada	National Institute for Fusion Science, Department of Helical Plasma Research, Professor	Production and Control of Super-Dense Plasmas towards an Innovative Ignition Regime for a Fusion Reactor	FY2008-2012	122,200
Yoichi Kawakami	Kyoto University, Department of Electronic Science and Engineering, Professor	Development of Key Technologies for the Multi-probe Spectroscopy based on Near-field Optics	FY2009-2013	123,900
Masataka Nakazawa	Tohoku University, Research Institute of Electrical Communciation, Professor	GHz Mode-locked Pulse Laser with Simultaneously Stabilized Optical Frequency and Repetition Rate and its Applications	FY2009-2013	141,500
Satoshi Kawata	Osaka University, Graduate School of engineering, Professor	UV Plasmonics	FY2009-2013	150,700

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Toshiyuki Hashida	Tohoku University, Graduate School of Engineering, Professor	Development of Design-Fabrication-Evaluation Methodology for High Performance Composites Reinforced by Carbon Nanotube	FY2009-2013	103,500
Takayuki Kitamura	Kyoto University, Graduate School of Engineering, Professor	Fatigue Damage and Fracture at Nano-Interface	FY2009-2013	167,800
Koichi Hishida	Keio University, Faculty of Science and Technology, Professor	Development of Micro/Nanoscale Thermofluid Multiple Sensing and Interface-Controlled Device	FY2009-2013	137,500
Migaku Takahashi	Tohoku University, Graduate School of Engineering, Professor	Creation of Spin-Nanostructure with Extreme High Magnetic Moment	FY2009-2013	157,400
Tsunenobu Kimoto	Kyoto University, Graduate School of Engineering, Professor	Defect Engineering in SiC and Application to Robust Devices with Ultra-High Blocking Voltage	FY2009-2013	156,500
Mitsumasa Koyanagi	Tohoku University, New Industry Creation Hatchery Center, Professor	Three-Dimensionally Stacked Optoelectronic System-on-Chip Fabricated Using Grapho-Assembly	FY2009-2013	163,100
Masahiro Asada	Tokyo Institute of Technology, Graduate School of Science and Engineering, Professor	Development of devices and systems toward realization of high-capacity wireless communications by terahertz waves	FY2009-2013	164,100
Kazuo Hotate	The University of Tokyo, Graduate School of Engineering, Professor	Functional Evolution of Fiber Optic Nerve Systems with Optical Correlation Domain Technique for Structures and Materials that can Feel Pain	FY2009-2013	156,800
Toshihiro Noda	Nagoya University, Graduate School of Engineering, Professor	Reevaluation of the seismic resistance of coastal areas in the event of large-scale serial ocean trench earthquakes, with a consideration of foundation reinforcement technologies	FY2009-2013	68,600
Naoyuki Funamizu	Hokkaido University, Graduate School of Engineering, Professor	Development of Resources Oriented Sanitation System Based on the Concept "Don't Mix" and "Don't Collect" Wastewater	FY2009-2013	83,100
Kenichiro Hidaka	University of Tsukuba, Graduate School of Comprehensive Human Sciences, Professor	Studies on the Documentation, Conservation and Utilization of Byzantine Architectural Heritage in the Middle East and North Africa	FY2009-2013	141,500
Takayuki Takasugi	Osaka Prefecture University, Graduate School of Engineering, Professor	Basic Research to Develop Dual Multi-phase Intermetallic Alloys as Next-generation Type Heat Resistant Materials	FY2009-2012	79,500
Toyonobu Yoshida	The University of Tokyo, Graduate School of Engineering, Professor	Next generation mesoplasma SIEMENS technology for direct production of wafer - equivalent thin film solar cells	FY2009-2012	124,000
Kazuhiro Nakahashi	Tohoku University, Graduate School of Engineering, Professor	Research and Development of Next-Generation CFD for Peta-Flops Computers.	FY2009-2013	164,800
Shunjiro Shinohara	Kyushu University, Interdisciplinary Graduate School of Engineering Sciences, Associate Professor	Research and Development of a Novel Electrodeless Plasma Rocket Engine Using a Helicon Source	FY2009-2013	160,700
Tetsuji Sunami	Japan Aerospace Exploration Agency, Space Transportation Mission Directorate, Associate Senior Researcher	HyperMixer Scramjet Engine for Wide Flight Mach Number Range	FY2009-2013	116,800
Yuichi Takase	The University of Tokyo, Graduate School of Frontier Sciences, Professor	Current Drive by Lower Hybrid Wave in Spherical Tokamak Plasmas	FY2009-2013	74,100
Yoichi Yoshida	Osaka University, The Institute of Scientific and Industrial Research, Professor	Attosecond and femtosecond pulse radiolysis study	FY2009-2013	161,300

Biological Sciences (85 Projects)

○ Biology (23 Projects)

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Makoto Matsuoka	Nagoya University, Bioscience and Biotechnology Center, Professor	Study on gibberellin perception	FY2006–2010	86,000
Masasuke Yoshida	Kyoto Sangyo University, Faculty of Life Sciences, Professor	Structure, rotation, and regulation of ATP synthase (FoF1)	FY2006–2010	85,600
Yoshikazu Nakamura	The University of Tokyo, Institute of Medical Science, Professor	Sequence Complementarity–Independent Functional RNAs	FY2006–2010	87,000
Shinji Takada	National Institutes of Natural Sciences, Okazaki Institute for Integrative Biosciences, Professor	Molecular mechanism underlying metameric morphogenesis	FY2006–2010	85,400
Shintaroh Ueda	The University of Tokyo, Graduate School of Sciences, Professor	Ancient Chinese: their Genetic Diversity and Life History	FY2006–2010	81,300
Yoshitaka Fukada	The University of Tokyo, Graduate School of Science, Professor	Molecular Analysis of Light–signaling and Circadian Rhythm in the Brain	FY2007–2011	81,600
Haruo Saito	The University of Tokyo, The Institute of Medical Science, Professor	Osmoregulatory MAP kinase signal transduction pathway	FY2007–2011	81,800
Juichi Yamagiwa	Kyoto University, Graduate School of Science, Professor	Evolutionary Anthropology of Conflicts and Resolution	FY2007–2011	74,000
Masamitsu Wada	Kyushu University, Faculty of Sciences, Professor special appointment	Functional Analysis of Newly–found Actin Structure Involved in Chloroplast Photorelocation Movement	FY2008–2012	159,800
Yoshinori Shichida	Kyoto University, Graduate School of Science, Professor	Functional Diversity of Visual Pigments and Photoreceptor cells	FY2008–2012	159,800
Osamu Nureki	The University of Tokyo, Graduate School of Science, Professor	Structural basis for molecular mechanisms of substrate recognition and transport regulation by membrane transporters	FY2008–2012	159,900
Yuichiro Maeda	Nagoya University, Graduate School of Science, Professor	Structure and dynamics of actin filament complex: mechanism of calcium regulation of muscle contraction	FY2008–2012	158,200
Yoshifumi Nishimura	Yokohama City University, Graduate School of Nanobioscience, Professor	Dynamics of intrinsically disordered proteins and their functional roles	FY2008–2012	138,000
Hiroyuki Araki	National Institute of Genetics, Department of Cell Genetics, Professor	Molecular mechanism and regulation of assembly and remodeling of proteins	FY2008–2012	153,700
Kozo Kaibuchi	Nagoya University, Graduate School of Medicine, Professor	Molecular Networks for the Regulation of Cell Polarization in Migrating Cells and Neurons	FY2008–2012	150,000
Kenichiro Shimazaki	Kyushu University, Faculty of Science, Professor	The transduction of light signal to ion transport in stomatal guard cells	FY2009–2013	158,400
Norihiro Okada	Tokyo Institute of Technology, Department of Bioscience and Biotechnology, Professor	Emergence of new species: the molecular mechanisms of speciation and macroevolution	FY2009–2013	113,800
Tomitake Tsukihara	University of Hyogo, Graduate School of Life Science, Professor	X–ray crystallographic studies of intra– and inter–cellular transport	FY2009–2013	180,900
Eisuke Nishida	Kyoto University, Graduate School of Biostudies, Professor	Signal transduction networks regulating life span and development	FY2009–2013	164,000
Yoshimi Takai	Kobe University, Graduate School of Medicine, Professor	Roles of Cell Adhesion and Signaling in Cell Morphogenesis	FY2009–2013	160,000
Keiichi Namba	Osaka University, Graduate School of Frontier Biosciences, Professor	Structural study of bacterial flagellar motor and protein export apparatus by electron cryomicroscopy	FY2009–2013	157,600

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Masayuki Yamamoto	The University of Tokyo, Graduate School of Science, Professor	Regulatory Mechanisms of Meiosis in Fission Yeast	FY2009-2013	159,800
Yumiko Saga	National Institute of Genetics, Genetic Strains Research Center, Professor	Molecular mechanism underlying sexual development of male germ cells	FY2009-2013	160,000

○ Agricultural sciences (21 Projects)

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Ichiro Ueda	Hokkaido University, Graduate School of Agriculture, Professor	Modification of plant gene expression by viral gene silencing suppressors	FY2006-2010	74,800
Katsuhiko Kitamoto	The University of Tokyo, Graduate School of Agricultural and Life Sciences, Professor	Understanding of high protein secretion capability in koji mold by molecular and cellular biology techniques and its use as a cell factory	FY2006-2010	86,200
Kazuhiko Imakawa	The University of Tokyo, Graduate School of Agricultural and Life Sciences, Associate Professor	Remodeling on molecular mechanisms of pregnancy establishment and regulation	FY2006-2010	86,000
Takashi Tsuge	Nagoya University, Graduate School of Bioagricultural Sciences, Professor	Comparative genomics of the conditionally dispensable chromosomes controlling plant infection in <i>Alternaria alternata</i> pathogens	FY2007-2011	79,000
Ryuichiro Sato	The University of Tokyo, Graduate School of Agricultural and Life Sciences, Professor	Studies on molecular mechanisms of lipid accumulation in adipocytes for anti-metabolic syndrome	FY2007-2011	79,900
Shugo Watabe	The University of Tokyo, Graduate School of Agricultural and Life Sciences, Professor	Genome-wide study on the regulation of fish muscle differentiation	FY2007-2011	79,500
Noboru Murakami	University of Miyazaki, Faculty of Agriculture, Professor	Translational research on novel peptides in veterinary and livestock science	FY2007-2011	79,000
Ko Shimamoto	Nara Institute of Science and Technology, Graduate School of Biological Science, Professor	Molecular basis of Rac GTPase in plant innate immunity	FY2007-2011	74,600
Kazumitsu Ueda	Kyoto University, Institute for Integrated Cell-Material Sciences, Professor	Physiological substances and functions of ABC proteins involved in lipid transport	FY2008-2012	123,900
Teruo Miyazawa	Tohoku University, Graduate School of Agricultural Science, Professor	Studies on lipid peroxidation in human disease: its modulation from the view point of food chemistry	FY2008-2012	155,900
Yuzuru Suzuki	The University of Tokyo, Graduate School of Agricultural and Life Sciences, Professor	Improved breeding of fugu following whole genome sequencing	FY2008-2012	146,600
Hiroshi Nonami	Ehime University, Faculty of Agriculture, Professor	Cell Turgor Measurement – Probe Electrospray Ionization (PESI) Mass Spectrometry for Molecular Profiling Techniques	FY2008-2012	124,300
Hiroshi Ozaki	The University of Tokyo, Graduate School of Agricultural and Life Sciences, Professor	Studies on the phased immune-barrier systems in gut-liver axis focusing on immune responses of mesenchymal cells	FY2008-2012	117,300
Takafumi Uchida	Tohoku University, Graduate school of Agricultural Science, Professor	Finding of Regulatory Proteins of Microtubule Polymerization and Discovery of Natural Compounds against Dementia	FY2008-2012	80,800
Kazuya Akimitsu	Kagawa University, Faculty of Agriculture, Professor	Mechanism of disease caused by deficiency of degradation of tRNA intron in mitochondria	FY2009-2013	82,200
Toru Fujiwara	The University of Tokyo, Biotechnology Research Center, Associate Professor	Homeostasis of Plant Mineral Nutrients and Growth- Modeling of Overall Regulation	FY2009-2013	160,700
Minoru Yoshida	RIKEN, Chemical Genetics Laboratory, Chief Scientist	Chemical Genetics on Novel Function of Splicing Factors	FY2009-2013	153,700
Kazuhiko Fukushima	Nagoya University, Graduate School of Bioagricultural Sciences, Professor	Direct visualization of the in vivo distribution of chemical components in plant cells by TOF-SIMS	FY2009-2013	85,100

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Katsumi Tsukamoto	The University of Tokyo, Atmosphere and Ocean Research Institute, Professor	Development of mass production technique of glass eel for aquaculture based on recent advancement in ecology, physiology and behavior	FY2009-2013	156,300
Yuji Mori	The University of Tokyo, Graduate School of Agriculture and Life Sciences, Professor	Control of Physiological Function and Behavior by Mammalian Pheromones	FY2009-2013	157,800
Akira Isogai	The University of Tokyo, Graduate School of Agricultural & Life Sciences, Professor	Preparation of Completely Individualized Nanofibrils from Biomass, and Their Conversions to Environmentally Compatible Materials	FY2009-2013	151,500

○ Medicine, dentistry, and pharmacy (41 Projects)

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Akira Matsuda	Hokkaido University, Faculty of Pharmaceutical Sciences, Professor	Development of new functional nucleic acids having nuclease-resistant properties being included in a multi-functional envelope type nano device	FY2006-2010	83,200
Tetsuya Terasaki	Tohoku University, Graduate School of Pharmaceutical Sciences, Professor	Proteomics-based Analysis of Blood-Brain Barrier Transport System	FY2006-2010	85,500
Hiroto Okayama	The University of Tokyo, Graduate School of Medicine, Professor	Molecular Mechanism of Anchorage-Dependent and -Independent S Phase Onset	FY2006-2010	86,700
Akio Nomoto	Microbial Chemistry Research Foundation, Microbial Chemistry Research Center, Director	Poliovirus dissemination and host functions	FY2006-2010	87,200
Masaru Taniguchi	RIKEN, Lab of Immune Regulation, Group Director	The mechanisms of development and differentiation in Valpha14 NKT cells	FY2006-2010	86,600
Hiroshi Shimokata	National Center for Geriatrics and Gerontology, Center for Development of Advanced Medicine for Dementia, Director	A large-scale interdisciplinary longitudinal study on mental health in the middle-aged and elderly persons - development of strategy for prevention	FY2006-2010	79,100
Shuichi Kaneko	Kanazawa University, School of Medicine, Professor	Overfeeding breaks down liver function and results in life-style related disease	FY2006-2010	77,400
Takashi Yamamura	National Institute of Neuroscience, Department of Immunology, Director	Exploration and Identification of Biomarkers of Multiple Sclerosis Which is Relevant for Management and Research of MS	FY2006-2010	103,600
Masaki Noda	Tokyo Medical and Dental University, Medical Research Institute, Professor	Molecular Analyses of Osteoblastic Niche and its Application with the Development of Nano Science	FY2006-2010	84,200
Yuzo Ninomiya	Kyushu University, Graduate School of Dental Sciences, Professor	Taste Signaling Mechanisms for the Regulation of Food Intake: Approaches to Establishment for Taste Health Science	FY2006-2010	86,500
Gozoh Tsujimoto	Kyoto University, Graduate School of Pharmaceutical Sciences, Professor	New genome medicine and drug discovery based on the comprehensive transcriptome analysis	FY2007-2011	85,200
Akihito Yamaguchi	Osaka University, The Institute of Scientific and Industrial Research, Professor	Structures, functions, regulations and physiological roles of xenobiotic exporters	FY2007-2011	84,400
Masayuki Miura	The University of Tokyo, Graduate School of Pharmaceutical Sciences, Professor	Visualization of oscillation for stress signal and molecular genetic study of establishment of cell community	FY2007-2011	84,400
Yasunori Okada	Keio University, School of Medicine, Professor	Functional analyses and regulation of the metabolism of tissue microenvironmental factors by metalloproteinases	FY2007-2011	89,700
Takashi Saito	RIKEN, Laboratory for Cell Signaling, Group Director	Spatiotemporal regulation of antigen recognition and activation of T cells	FY2007-2011	84,400
Kozo Nakamura	The University of Tokyo, University Hospital, Professor	Comprehensive Study of Osteoarthritis for Elucidation of the Etiology and Identification of the Molecular Target of Treatment: The ROAD Study	FY2007-2011	85,300

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Masaharu Takigawa	Okayama University, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Professor	Comprehensive study on molecular basis of action of CCN family proteins as novel signal conductors and its translational application	FY2007-2011	85,000
Masakatsu Shibasaki	Microbial Chemistry Research Foundation, Microbial Chemistry Research Center, Director	Innovative Asymmetric Synthesis of Pharmaceuticals Through Strategic Development of Multifunctional and Multimetallic Catalysts	FY2008-2012	160,700
Tsutomu Masujima	Hiroshima University, Graduate School of Biomedical Sciences, Professor	Single-cell on-time molecular analysis by hyper-sensitive video-mass scope	FY2008-2011	160,700
Hidenori Ichijo	The University of Tokyo, Graduate School of Pharmaceutical Sciences, Professor	Establishment of the basis for drug development by the analysis of molecular mechanisms of stress signaling	FY2008-2012	160,400
Shinichi Nishikawa	RIKEN, Stem Cell Research Group, Group Director	Analysis of Methylome of Cancer by high throughput sequencer	FY2008-2012	148,700
Chihiro Sasakawa	The University of Tokyo, The Institute of Medical Science, Professor	Study of Shigella infectious strategy for the intestinal barrier	FY2008-2012	152,800
Hitoshi Kikutani	Osaka University, Research Institute for Microbial Diseases, Professor	Roles of guidance factors in immune regulation	FY2008-2012	159,300
Takashi Kadowaki	The University of Tokyo, University Hospital, Professor	An integrative elucidation of the energy metabolism-regulating system and its disruption	FY2008-2012	174,800
Masahiro Hiraoka	Kyoto University, Graduate School of Medicine, Professor	Development of an innovative radiotherapy technologies for the improvement of treatment outcomes of intractable cancers	FY2008-2012	159,100
Toshiyuki Yoneda	Osaka University, Graduate School of Dentistry, Professor	Integrative Study of transcriptional network systems during endochondral ossification	FY2008-2010	164,100
Masahiko Yamaguchi	Tohoku University, WPI-Advanced Institute of Materials Research, Professor	Development and Efficient Production of Organosulfur and Organophosphorus Compounds by Transition Metal Catalyzed Method	FY2009-2013	159,000
Shigeki Sasaki	Kyushu University, Graduate School of Pharmaceutical Sciences, Professor	Study on Innovative Molecular Target Nano-Medicines Using Nano Delivery System Encapsulating Smart Synthetic Oligodeoxynucleotides	FY2009-2013	159,300
Yasushi Okamura	Osaka University, Graduate School of Medicine, Professor	Molecular mechanisms and biological roles of electro-chemical coupling mediated by voltage-sensor domain proteins	FY2009-2013	130,700
Masamitsu Iino	The University of Tokyo, Graduate School of Medicine, Professor	Imaging analysis of signaling mechanisms in the central nervous system cell-cell networks	FY2009-2013	183,800
Makoto Mark Taketo	Kyoto University, Graduate School of Medicine, Professor	Studies on Metastasis of Digestive Cancers Using Mouse Models	FY2009-2012	159,300
Tadashi Yamamoto	The University of Tokyo, Institute of Medical Science, Professor	Dissection of mRNA degradation pathways and anomalies associated with targeted disruption of CCR4-NOT deadenylase complex	FY2009-2013	159,200
Tomohiro Kurosaki	Osaka University, WPI Immunology Frontier Research Center, Specially Appointed Professor	Mechanisms of Generation, Maintenance, and Activation of Humoral Memory	FY2009-2013	159,400
Ichiro Taniuchi	RIKEN RCAI, Laboratory for Transcriptional Regulation, Team leader	Analyses of transcription factors networks that govern T lymphocyte development	FY2009-2013	159,500
Tsutomu Chiba	Kyoto University, Graduate School of Medicine, Professor	Mechanism for genomic instability during inflammation-associated carcinogenesis	FY2009-2012	120,200
Issei Komuro	Osaka University, Graduate School of Medicine, Professor	Role of Wnt signaling in cardiomyocyte differentiation and its implication for the treatment of heart diseases	FY2009-2013	162,900
Gen Sobue	Nagoya University, Graduate School of Medicine, Professor	Development of Molecular Targeted Disease Modifying Therapy for Polyglutamine Diseases	FY2009-2013	122,100

Principal Investigator		Title	Term of Project	Total (Thousand yen)
Toshiro Fujita	The University of Tokyo, University Hospital, Professor	Activation mechanisms of the aldosterone / mineralocorticoid receptor system in metabolic syndrome	FY2009-2013	162,900
Kazuwa Nakao	Kyoto University, Graduate School of Medicine, Professor	Physiological Roles of Mesenchymal cell-Derived Hormones and Their Failures	FY2009-2013	163,000
Masayuki Amagai	Keio University, School of Medicine, Professor	Clarification of the molecular and cellular mechanisms of central and peripheral tolerance to pemphigus autoantigen	FY2009-2013	161,800
Masaki Mori	Osaka University, Graduate School of Medicine, Professor	Comprehensive Molecular Genetics of Esophagus Cancer Study for Development of State-of-art Therapy.	FY2009-2013	162,700