

Grant-in-Aid for Transformative Research Areas (B)

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□ Distribution by Research Area of the Newly Adopted Projects

Purpose and Description of Grant-in-Aid for Transformative Research Areas(B) (excerpt from the “Application Procedures for Grants-in-Aid for Scientific Research” for FY2020):

1) Purpose:

Research areas proposed by compact, small-scale groups of researchers who will be bearers of the next generation of research (about 3 or 4 groups), which aim to create research areas that will lead to radical transformation of and change in the existing framework and/or direction of research as well as upgrade and level-up of scientific research in Japan through more challenging and exploratory research, and expected to lead to Transformative Research Areas (A) in the future.

2) Total budget provided:

The budget provided per research area is 50 million yen or less per fiscal year.

3) Research period:

3 years (application for research period other than the left is not subject to screening)

4) Number of research projects scheduled to be selected:

Similar number as Transformative Research Areas (A) is scheduled to be selected.

【 New Projects 】

	Number of Applications			Total Grant Disbursements [※] (FY2020) (Thousands of yen)	Per-project Grants [※] (FY2020)	
	Received	Adopted	Ratio		Average	Largest
			(%)		(Thousands of yen)	(Thousands of yen)
Section I	58	3	5.2	61,800	20,600	34,900
Section II	238	7	2.9	281,300	40,186	43,100
Section III	285	8	2.8	340,700	42,588	43,200
Section IV	69	2	2.9	79,200	39,600	41,900
Total	650	20	3.1	763,000	38,150	43,200

※ Direct expense only

List of the Newly Adopted Projects for Grant-in-Aid for Transformative Research Areas (B) of KAKENHI, FY2020

(1) Section I (3 Projects)

(Thousands of Yen)

Number of Research Area	Principal Investigator (Name, Researcher Number, Research Institution)		Title	Term of Project	Annual Budget
					Budget throughout for the Entire Research Period
20B101	TSUCHIYA Naotsugu 80517128	Advanced Telecommunications Research Institute International, Brain Information Communication Research Laboratory Group, Visiting Researcher	Understanding the relationship between the structure of qualia and the structure of information processing extracted from brain activity	FY2020-2022	14,800
					65,000
20B102	SHIBATA Kazuhisa 20505979	RIKEN Center for Brain Science, Team leader	Understanding and breaking the limit of human minds and performance	FY2020-2022	34,900
					97,500
20B103	OHNUKI Toshio 30708095	Tokyo Metropolitan University, Graduate School of Humanities, Associate Professor	Religious Movements and Communication Medium/Worldview/Social Integration: A Synthetic Approach of Historical Research	FY2020-2022	12,100
					29,700

(2) Section II (7 Projects)

(Thousands of Yen)

Number of Research Area	Principal Investigator (Name, Researcher Number, Research Institution)		Title	Term of Project	Annual Budget
					Budget throughout for the Entire Research Period
20B201	KAMIYA Mako 90596462	The University of Tokyo, Graduate School of Medicine, Associate Professor	Innovative multiplex imaging with functional Raman probes	FY2020-2022	42,900
					121,500
20B202	MIURA Hiroaki 70415991	The University of Tokyo, Faculty of Science, Associate Professor	Challenge to the new generation cloud-resolving climate simulation	FY2020-2022	43,000
					122,000
20B203	NUMATA Keiji 40584529	Kyoto University, Graduate School of Engineering, Professor	Precision Degradation of Polymer and Polymeric Material	FY2020-2022	43,100
					122,100
20B204	NAKA Hiroshi 70431517	Kyoto University, Graduate School of Pharmaceutical Sciences, Associate Professor	Deuterium Science	FY2020-2022	43,000
					121,800
20B205	SUGIMOTO Masahiro 30458963	Tokyo Medical University, School of Medicine, Professor	Science for virtual human development: Organ(s)-on-a-chips reveal systemic metabolic networks	FY2020-2022	42,900
					121,900
20B206	FUNASE Ryu 70509819	Japan Aerospace Exploration Agency (JAXA), Institute of Space and Astronautical Science (ISAS), Professor	Agile and Frequent Solar System Exploration with Innovative Microsatellite	FY2020-2022	23,900
					102,400
20B207	ONISHI Ryo 30414361	Tokyo Institute of Technology, Global Scientific Information and Computing Center, Associate Professor	Micro-meteorology control: Integrated technology of harmonic prediction and active monitoring of micro-meteorology for future autonomous society	FY2020-2022	42,500
					119,900

(3) Section III (8 Projects)

(Thousands of Yen)

Number of Research Area	Principal Investigator (Name, Researcher Number, Research Institution)		Title	Term of Project	Annual Budget
					Budget throughout for the Entire Research Period
20B301	INOUE Keiichi 90467001	The University of Tokyo, The Institute for Solid State Physics, Associate Professor	Next-generation non-invasive biological deep-tissue manipulation by biomolecular engineering and low physical energy logistics	FY2020-2022	42,900
					121,900
20B302	NAKAMURA Tomonori 90648429	Kyoto University, The Hakubi Center for Advanced Research, Program-specific associate professor	A new foundation for primate developmental biology	FY2020-2022	43,000
					122,000
20B303	YAMAGUCHI Yoshifumi 10447443	Hokkaido University, Institute of Low Temperature Science, Professor	Mammalian hibernation biology ~ survival strategies via hypometabolism and hypothermia	FY2020-2022	43,100
					122,100
20B304	YAMAMOTO Masahiro 00444521	Osaka University, Research Institute for Microbial Diseases, Professor	Construction of PLAMP for determination of boundary between self and non-self in intracellular pathogens	FY2020-2022	43,100
					122,300
20B305	MURAYAMA Masanori 30578901	RIKEN Center for Brain Science, Team leader	Morphological features and gene expression patterns underlying hub neurons	FY2020-2022	43,200
					122,400
20B306	MARUYAMA Daisuke 80724111	Yokohama City University, Kihara Institute for Biological Research, Assistant Professorr	Remodeling Plant Reproduction System by Cell Fate Manipulations.	FY2020-2022	39,400
					106,100
20B307	DOI Masao 20432578	Kyoto University, Graduate School of Pharmaceutical Sciences, Professor	Parametric biology based on translation rate regulatory mechanism	FY2020-2022	43,000
					122,000
20B308	TAKAHASHI Nobuaki 70604635	Kyoto University, The Hakubi Center for Advanced Research, Program-specific associate Professor	Establishment of pH Biology	FY2020-2022	43,000
					122,000

(4) Section IV (2 Projects)

(Thousands of Yen)

Number of Research Area	Principal Investigator (Name, Researcher Number, Research Institution)		Title	Term of Project	Annual Budget
					Budget throughout for the Entire Research Period
20B401	ITO Takehiro 40431548	Tohoku University, Graduate School of Information Sciences, Professor	Fusion of Computer Science, Engineering and Mathematics Approaches for Expanding Combinatorial Reconfiguration	FY2020-2022	37,300
					123,700
20B402	YAMANISHI Yoshihiro 60437267	Kyushu Institute of Technology, Faculty of Computer Science and Systems Engineering, Professor	Synergy pharmaceutical science: understanding and design of compound combination effects by integrating information, material, and life sciences	FY2020-2022	41,900
					119,700