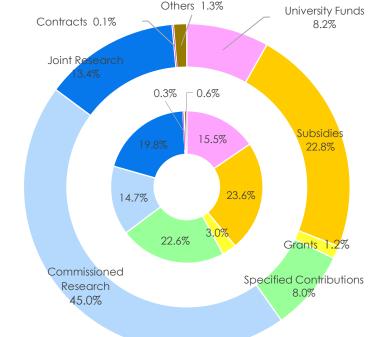
2018 Keio University Annual Report on Research Activities



Research funds at Keio University from national and local public institutions, private businesses, and university funding totaled approximately US\$ 216 million in FY2018. The charts below show research fund totals classified in various ways. Amount <outer ring>, Number. of Projects <inner ring> (\$=¥110)

Posoarch Funds by Typo

Research Funds by Type		Thousand US Dollars
Types of Funds	Number of Projects	Amount
University Funds	845	17,656
Subsidies	1,285	49,315
Grants	166	2,705
Specified Contributions	1,233	17,305
Commissioned Research	802	97,395
Joint Research	1,078	28,983
Contracts	14	268
Others	30	2,835
Total	5,453	216,462



Definition

Subsidies: Research funds provided mainly by government and public offices.

Grants: Research expenses provided mainly by foundations for the purpose of improvement or accomplishment of research.

Specified Contributions: Contributions earmarked for research activities.

Commissioned Research: Research commissioned by government and public offices, as well as private enterprises.

Joint Research: Research involving personnel exchanges and/or sharing technology/facilities under the joint research agreement,

with or without payment of research funds.

Contracts: Research under a contract agreement.



Subsidies

Grants

Specified Contributions

Commissioned Research

Joint Research

Contracts

Others

^{*}As of April 30, 2019

^{*}Discrepancies may arise in the total amount as totals are rounded to the thousand.

Research Funds by Type FY2014-2018

■ Research F	unds by Type over	the Past 5 Years				(\$=¥110) Thousand US Dollars
Type of Re	search Funds	FY2014	FY2015	FY2016	FY2017	FY2018
University	Funds	6,031	6,434	5,961	5,049	17,656
Subsidies		63,296	52,738	51,809	48,919	49,315
Grants		2,089	2,565	2,924	3,365	2,705
Specified C	Contributions	18,043	15,022	14,646	21,259	17,305
Commissio	ned Research	58,017	85,560	88,338	83,660	97,395
Joint Resea	arch	15,344	17,804	20,110	22,504	28,983
Contracts		1,305	647	502	879	268
Others		247	214	164	235	2,835
Total		164,371	180,984	184,452	185,869	216,462
				1		
/2014				164,371	ı	
-					!	University Funds
(2015					180,984	Subsidies
		1		1		Grants
				,		Specified Contribution
(2016					184,452	Commissioned Research
-					N	■ Joint Research
(2017					185,869	Contracts
-						■ Others
(2018				,		216,462
						·
	50,000	100,000	1.	50,000	200,000	

* University funds were revalued in 2018, part of which were not counted as such in the previous years.

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Research Funds by Field in FY2018

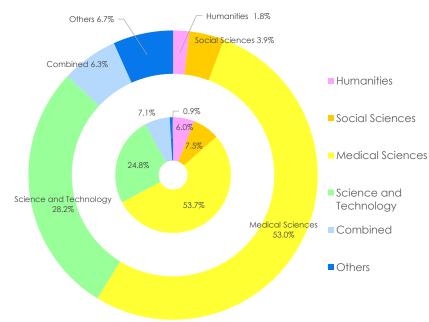
The data in this section are compiled with reference to classification of the field of research in other official reports such as the Survey of Research and Development by the Ministry of Internal Affairs and Communications, and various surveys on research expenses by the Japan Association of Private Universities and Colleges.

(\$=¥110)

Research Funds by Field

■ Research Funds by Field		Thousand US Dollars
Research Fields	Number of Projects	Amount
Humanities	325	3,881
Social Sciences	410	8,498
Medical Sciences	2,928	114,797
Science and Technology	1,352	61,109
Combined	387	13,646
Others	51	14,531
Total	5,453	216,462

Amount <outer ring>, Number. of Projects <inner ring>



Humanities

History, Philosophy, Literature, Languages, and other humanities.

Social Sciences

Economics, Sociology, Business and Commerce, Political Science, Law, and other social sciences.

Medical Sciences

Medicine, Nursing, Pharmaceutical Science, and other health and medical sciences.

Science and Technology

Applied Chemistry, Chemistry, Mechanics and Shipbuilding, Engineering, Mathematics, Electrics, Communications, Physics, and other sciences and technology.

Combined

Interdisciplinary fields.

Others

Research Funds by Affiliation in FY2018

Classifying funds by affiliation of researcher (in principle, the representative researcher)

■ Research Funds by Affiliation of Researchers

(\$=¥110) Thousand US Dollars

Affiliation of Researchers	Number of Projects	Amount
Faculty / Graduate School of Letters	172	2,409
Faculty / Graduate School of Economics	133	2,799
Faculty / Graduate School of Law	88	1,137
Faculty / Graduate School of Business and Commerce	98	2,828
Faculty / Graduate School of Medicine	2,632	106,914
Faculty / Graduate School of Science and Technology	1020	39,512
Faculty of Policy Management	156	2,602
Faculty of Environment and Information Studies	369	22,302
Faculty of Nursing and Medical Care	53	764
Faculty of Pharmacy / Graduate School of Pharmaceutical Sciences	195	4,509
Graduate School of Human Relations	3	18
Graduate School of Media and Governance	161	5,978
Graduate School of Health Management	7	963
Graduate School of Business Administration	51	614
Graduate School of System Design and Management	76	3,619
Graduate School of Media Design	64	2,423
Law School	28	227
Others	147	16,845
Total	5,453	216,462

^{*}Discrepancies may arise in the total amount as totals are rounded to the thousand.

Research

Research Funds by Type

■ Types of External Entities Contributing Research Funds

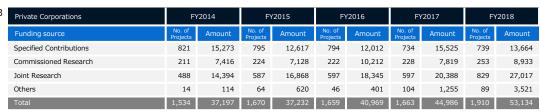
Thousand US Dollars

Type of External Entities	Number of Projects	Amount
Government *1	1,259	46,086
Local Public Entities	73	8,653
Independent Administrative Agencies, Semi-Governmental Corporations *2	554	82,440
Private Corporations *3	1,910	53,134
Other Universities	70	716
Non-profit Foundations, Charitable Organizations	255	4,438
Foreign Countries	38	926
Private Individuals	439	2,334
Others	10	79
Total	4,608	198,806

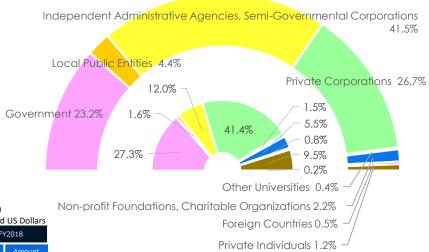
(\$=¥110)		
Thousand	US	Dolla

1	Government	FY	2014	FY	2015	FY	2016	FY	′2017	FY	2018
	Funding source	No. of Projects	Amount								
	Ministry of Internal Affairs and Communications	13	1,527	9	629	10	1,506	10	1,988	9	1,254
	Ministry of Education	1,050	53,621	1,030	37,259	1,066	36,091	1,064	38,067	1,152	37,941
	Ministry of Health, Labor and Welfare	193	12,315	75	3,652	61	2,311	71	1,749	74	2,041
	Ministry of Environment	11	1,550	11	1,920	8	1,334	4	301	3	119
	Others	36	6,417	41	5,227	12	863	16	4,976	21	4,730
	Total	1,303	75,430	1,166	48,687	1,157	42,106	1,165	47,080	1,259	46,086

2	Independent Administrative Agencies, Semi-Governmental Corporations	F	/2014	FY	/2015	FY	/2016	F١	′2017	F١	/2018
	Funding source	No. of Projects	Amount								
	NICT *a	14	1,216	19	1,114	20	1,784	10	1,352	12	735
	JST *b	114	26,167	81	19,611	81	24,814	88	20,778	99	21,956
	AMED *c			201	50,825	216	48,634	220	43,108	289	52,110
	NEDO *d	16	2,399	12	1,096	18	1,866	16	2,173	22	3,695
	Others	107	2,606	91	1,689	111	2,158	110	3,010	132	3,943
	Total	251	32,388	404	74,336	446	79,256	444	70,422	554	82,440



Contribution Share by External Entity Type Amount <outer ring>, Number of Projects <inner ring>



- Government
- Local Public Entities
- Independent Administrative Agencies, Semi-Governmental Corporations
- Private Corporations
- Other Universities
- Non-profit Foundations, Charitable Organizations
- Foreign Countries
- Private Individuals
- *a National Institute of Information and Communications Technology
- *b Japan Science and Technology Agency
- *c Japan Agency for Medical Research and Development
- *d New Energy and Industrial Technology Development Organization

Research Funds by Campus in FY2018

■ Types of External Entities Contributing Research Funds to Each Campus

(\$=¥110) Thousand US Dollars

Campuses		Government Organizations	Non-Government Public Organizations	Private Corporations	Others	Total
Mita Campus	No. of Projects	179	8	18	1	206
Mita Campus	Amount	8,913	88	315	105	9,421
Hiyoshi Campus	No. of Projects	138	20	113	10	281
Thyosin Campus	Amount	4,648	588	3,590	260	9,085
Shinanomachi Campus	No. of Projects	904	155	1,016	417	2,492
Silination actif Campus	Amount	66,934	2,391	30,025	1,328	100,678
Vagami Camanua	No. of Projects	363	71	343	34	811
Yagami Campus	Amount	24,384	1,265	9,626	602	35,877
Shanan Euikawa Campus	No. of Projects	144	78	307	47	576
Shonan Fujisawa Campus	Amount	13,352	2,101	6,753	998	23,203
Shiba Kuaritau Campus	No. of Projects	57	27	60	2	146
Shiba-Kyoritsu Campus	Amount	2,547	563	855	120	4,085
Shin-Kawasaki Town Campus	No. of Projects	6	3	26	0	35
31111-Kawasaki Towii Carripus	Amount	1,495	38	968	0	2,501
Tsuruoka Town Campus	No. of Projects	19	8	23	2	52
TSUITUOKA TOWIT CAITIPUS	Amount	2,028	6,571	415	10	9,024
Tonomachi Town Campus	No. of Projects	3	2	4	0	9
Tonomachi Town Campus	Amount	4,225	118	588	0	4,930
Total	No. of Projects	1,813	372	1,910	513	4,608
Total	Amount	128,525	13,723	53,134	3,423	198,806

^{*} Totals are compiled based on the home campuses (in principle, the affiliation of the research project leaders). The actual research, however, may take place at different campuses.

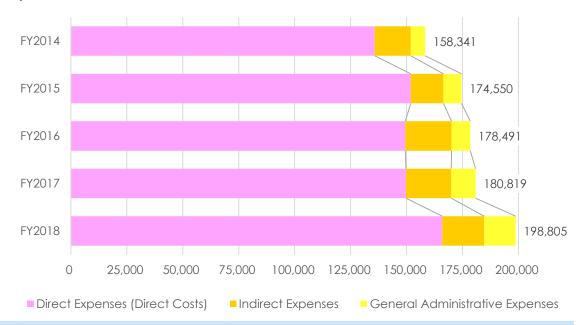
Direct and Indirect Research Expenses FY2014-2018

■ Direct and Indirect Research Expenses, and General Administrative Expenses over the Past 5 Years

(\$=¥110) Thousand US Dollars

					Thousand OS Dollars
Type of Research Funds	FY2014	FY2015	FY2016	FY2017	FY2018
Direct Expenses (Direct Costs)	135,817	151,884	149,453	149,758	165,932
Indirect Expenses	16,088	14,581	20,654	20,234	18,746
General Administrative Expenses	6,436	8,085	8,385	10,827	14,127
Total	158,341	174,550	178,491	180,819	198,805

^{*}Discrepancies may arise in the total amount as totals are rounded to the thousand.



Definition

Indirect Expenses: Expenses allocated equivalent to a certain percentage of the Competitive Research Funds in addition to the direct expenses for the research to supplement administrative and operational costs of the institution to which project leaders are affiliated.

General Administrative Expenses (Overhead Costs): Expenses allocated to supplement administrative costs for research other than direct expenses for the research, other than Indirect Expenses.

The Grants-in-Aid for Scientific Research (KAKENHI) Program

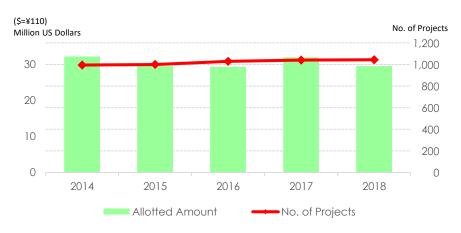
(\$=¥110)

Instit	Million US Dollars		
Rank	Name of Organization	No. of Projects	Amount
1	The University of Tokyo	3,825	197
2	Kyoto University	2,900	125
3	Osaka University	2,472	96
4	Tohoku University	2,388	89
5	Kyushu University	1,882	68
6	Nagoya University	1,741	69
7	Hokkaido University	1,610	55
8	University of Tsukuba	1,226	38
9	Kobe University	1,143	28
10	Hiroshima University	1,094	24
11	Keio University	1,043	30
12	Waseda University	950	25
13	Kanazawa University	870	20
14	Okayama University	870	19
15	Tokyo Institute of Technology	862	44
16	Chiba University	808	20
17	RIKEN	786	40
18	Niigata University	760	16
19	Kumamoto University	678	16
20	Tokyo Medical and Dental University	628	15

Amount Awarded to all organizations

■ Number of Projects and Total Funding at Keio University (over the Past 5 years)

Fiscal Year	Rank	No. of Projects	Allotted Amount	Total funds awarded to all organizations
2014	11	994	32	1,938
2015	11	999	30	1,882
2016	11	1,028	29	1,906
2017	11	1,040	32	1,924
2018	11	1,043	30	1,926



^{*}Source: MEXT website

1,926

http://www.mext.go.jp/a menu/shinkou/hojyo/1410868.htm

^{*}Allotted amount includes direct and indirect expenses.

^{*}Discrepancies may arise in the total amount as totals are rounded to the million.

^{*}This classification by the affiliation of only the project leaders, and thereby does not necessarily show the actual status of all the project members in their own affiliations.

Number of Researchers at Keio University in FY2018

■ Number of Researchers

Campuses	Tenured/ Semi-tenured Researchers	Project Researchers (Non-tenured)	Researchers (Non-tenured)
Mita Campus	397	28	3
Hiyoshi Campus	335	19	18
Shinanomachi Campus	554	177	156
Yagami Campus	264	23	18
Shonan Fujisawa Campus	177	62	8
Shiba-Kyoritsu Campus	67	5	0
Total	1,794	314	203

■ Development of Future Researchers

Graduate Schools	N	o. of Doctorates Conferred	No. of Students Enrolled in Doctoral Courses		
	Course Doctorates	Dissertation Doctorates	Maximum Occupancy	No.of Students Enrolled	
Graduate School of Letters	3	6	135	97	
Graduate School of Economics	7	1	45	37	
Graduate School of Law	9	0	90	70	
Graduate School of Human Relations	2	0	33	47	
Graduate School of Business and Commerce	2	4	60	25	
Graduate School of Medicine	71	53	320	418	
Graduate School of Science and Technology	81	3	450	308	
Graduate School of Business Administration	0	0	24	3	
Graduate School of Media and Governance	14	2	150	164	
Graduate School of Health Management	2	0	30	36	
Graduate School of System Design and Management	11	0	33	61	
Graduate School of Media Design	7	0	30	63	
Graduate School of Pharmaceutical Sciences	12	0	29	47	
Subtotal	221	69	1,429	1,376	
Total		290			

Research Fellows in FY2014-2018

Number of JSPS Research Fellows at Keio University

■ Research Fellows by Affiliation

Faculties, Graduate Schools, Research Institutions	FY2014	FY2015	FY2016	FY2017	FY2018
Faculty/Graduate School of Letters, Graduate School of Human Relations	30	23	19	18	18
Faculty/Graduate School of Economics	4	4	10	13	8
Faculty/Graduate School of Law	7	8	5	8	11
Faculty/Graduate School of Business and Commerce	1	3	4	4	4
Faculty/Graduate School of Medicine	32	30	33	32	30
Faculty/Graduate School of Science and Technology	48	48	61	65	56
Faculty of Policy Management, Faculty of Environment and Information Studies, Graduate School of Media and Governance	15	15	15	19	17
Faculty of Nursing and Medical Care, Graduate School of Health Management	0	0	0	0	0
Faculty of Pharmacy/Graduate School of Pharmaceutical Sciences	0	4	7	4	3
Graduate School of Business Administration	0	0	0	0	1
Graduate School of System Design and Management	1	0	0	0	0
Graduate School of Media Design	0	1	1	1	0
Law School	0	0	1	1	0
Affiliated Research Institutes	1	2	2	8	2
Total	139	138	158	173	150

■ Number of JSPS Research Fellow by Category

Category	FY2014	FY2015	FY2016	FY2017	FY2018		
DC1	56	59	60	56	50		
DC2	34	31	42	44	40		
PD	38	31	35	48	41		
SPD	1	0	0	1	1		
RPD	5	6	9	9	3		
Foreign Researchers	5	11	12	15	15		
Total	139	138	158	173	150		

*The "Research Fellowship for Young Researchers" program is divided into 4 categories; DC, PD, SPD, and RPD. Doctoral students and those with a doctoral degree are mainly accepted in the program, with periods of acceptance differing according to category.

http://www.jsps.go.jp/english/e-pd/index.html

*The "Postdoctoral Fellowship for Foreign Researchers" program is also available for overseas young researchers for providing them an opportunity to work together under the guidance of their academic advisors in Japanese universities, etc.

http://www.jsps.go.jp/english/e-fellow/index.html

Research

Researchers from Outside Keio in FY2018 (1)

Researchers from Outside Keio

■ Number of Researchers Accepted — Breakdown by Job Title and Status

Job Titels, Status	Number of Researchers	Qualification
School of Medicine Researchers	487	Researchers employed by research, educational, or medical institutions other than Keio University School of Medicine.
Research Associates of Faculty of Science and Technology	22	Researchers participating in research without a contract for commissioned research.
Researchers of KLL, Keio Leadingedge Laboratory of Science and Technology	52	Researchers participating in research under a commissioned research contract.
Distinguished Researchers, Keio Research Institute at SFC	3	A Distinguished Researcher is one who is recognized to be beneficial to the progress of research activities of the Institute and whose Faculty Sponsor is the Executive Director of the Institute. A Distinguished Researcher must have outstanding research achievements and research management results both in the home country and abroad, and be internationally and widely active.
Senior Researchers, Keio Research Institute at SFC	301	Senior Researchers are regarded as researchers who are accepted by Keio Research Institute at SFC upon recommendation by a Faculty Sponsor and then participate in research activities. A Senior Researcher must possess a Master's degree or equivalent/higher degree, and also be recognized as an experienced, distinguished, and self-sustained researcher.
Researchers, Keio Research Institute at SFC	118	Researchers are regarded as researchers who are accepted by Keio Research Institute at SFC upon recommendation by a Faculty Sponsor and then participate in research activities. A Researcher must possess a Bachelor's degree or equivalent/higher degree, and be recognized as an experienced and distinguished researcher.
Research Associates, Faculty of Pharmacy	40	Researchers participating in research without a contract for commissioned research.
Research Associates, Keio Advanced Research Centers	91	External researchers assigned for Keio Advanced Research Centers projects.
Visiting Professors and Researchers (See Table A)	561	
Others (See Table B)	588	
Total	2,263	

Research

Researchers from Outside Keio in FY2018 (2)

■ Table A: Number of Visiting Professors and Researchers

Job Titles, Status	Mita/Hiyoshi	Shinanomachi	Yagami	Shonan Fujisawa	Shiba-Kyoritsu	Total
Visiting Professors	41	17	24	6	0	88
Visiting Associate Professors	20	16	9	3	0	48
Visiting Assistant Professors	11	13	7	11	0	42
Visiting Instructors	1	10	13	0	0	24
Visiting Research Fellows	108	151	54	12	0	325
Visiting Junior Research Fellows	19	8	6	1	0	34
Total	200	215	113	33	0	561

Table B: Others

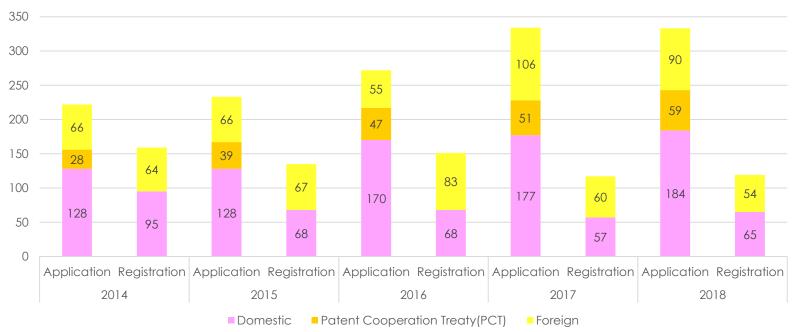
Campuses	Research Institute	* No. of Researchers at Keio University	No. of Researchers from Outside Keio	Total
Mita	Keio University Art Center	24	18	42
	Teacher Training Center	51	48	99
	Global Security Research Institute	64	42	106
	Institute for Economic Studies	74	53	127
	The Keio Institute of Cultural and Linguistic Studies	28	96	124
	International Center	17	31	48
	Keio Economic Observatory	48	69	117
	Institute of Oriental Classics (Shido Bunko)	10	3	13
	Center for Japanese Studies	9	52	61
	Keio Institute of East Asian Studies	22	36	58
	Fukuzawa Memorial Center for Modern Japanese Studies	26	42	68
	Institute for Journalism, Media and Communications Studies	13	21	34
Hiyoshi	Research Institute for Digital Media and Content (DMC)	10	0	10
	Institute of Physical Education	19	0	19
	Health Center	16	0	16
	Keio Research Center for Foreign Language Education	38	1	39
	Sports Medicine Research Center	8	26	34
	Keio Research Center for the Liberal Arts	193	0	193
	Research and Education Center for Natural Sciences	75	50	125
Total		745	588	1,333

Researchers at Keio University: the figure indicates the total number of researchers including teachers in the affiliated elementary and secondary schools of Keio, in addition to tenured and non-tenured researchers of undergraduate faculties/graduate schools or research institutes.

A researcher affiliated to more than one institution is counted researcher of each.

Intellectual Property Rights and Technology Transfer FY2014-2018

■ Number of Patent Applications and Registrations



Number of Income-generating Licenses and Income Amounts, Number of New Licensing Agreements

