2020 Keio University Annual Report on Research Activities



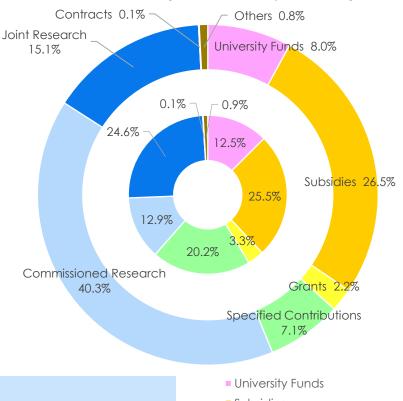
As of March 31, 2021

Research funds at Keio University from national and local public institutions, private businesses, and university funding totaled approximately US\$ 211 million in FY2020. The charts below show research fund totals classified in various ways. Amount <outer ring> and Number of Projects <inner ring>

Research Funds by Type		(\$=¥111) Thousand US Dollars
Types of Funds	Number of Projects	Amount
University Funds	691	16,844
Subsidies	1,412	55,995
Grants	185	4,671
Specified Contributions	1,115	14,990
Commissioned Research	712	85,042
Joint Research	1,361	31,802
Contracts	5	147
Others	52	1,695
Total	5,533	211,186

*As of March 31, 2021

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



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

Research Funds by Type over the Past 5 Years

				Ihou	sand US Dollars
Type of Research Funds	FY2016	FY2017	FY2018	FY2019	FY2020
niversity Funds	5,961	5,049	17,656	17,022	16,844
ubsidies	51,809	48,919	49,315	48,873	55,995
Grants	2,924	3,365	2,705	2,833	4,671
Specified Contributions	14,646	21,259	17,305	16,832	14,990
Commissioned Research	88,338	83,660	97,395	91,646	85,042
Joint Research	20,110	22,504	28,983	33,386	31,802
Contracts	502	879	268	456	147
Others	164	235	2,835	2,051	1,695
Total	184,452	185,869	216,462	213,099	211,186
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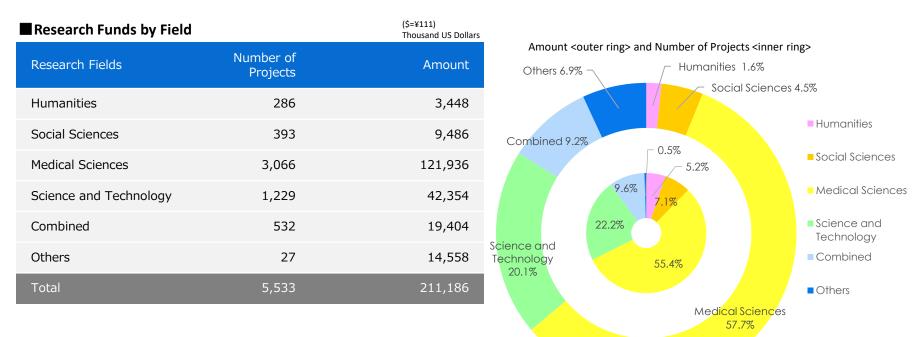
*The exchange rate from FY2016 to FY2019 is 110 JPY per 1 USD; the exchange rate of FY2020 is 111 JPY. Thousand US Dollars

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

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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.



Humanities

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

Social Sciences

Economics, Sociology, Business and Commerce, Political Science, Law, and other

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

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

Research Funds by Affiliation of Researchers		(\$=¥111) Thousand US Dollars
Affiliation of Researchers	Number of Projects	Amount
Faculty / Graduate School of Letters	161	2,874
Faculty / Graduate School of Economics	120	2,667
Faculty / Graduate School of Law	79	1,312
Faculty / Graduate School of Business and Commerce	97	2,222
Faculty / Graduate School of Medicine	2,766	113,742
Faculty / Graduate School of Science and Technology	1,052	30,322
Faculty of Policy Management	145	3,335
Faculty of Environment and Information Studies	355	20,551
Faculty of Nursing and Medical Care	40	788
Faculty of Pharmacy / Graduate School of Pharmaceutical Sciences	199	5,760
Graduate School of Human Relations	0	0
Graduate School of Media and Governance	163	4,160
Graduate School of Health Management	12	967
Graduate School of Business Administration	41	533
Graduate School of System Design and Management	74	2,938
Graduate School of Media Design	45	1,771
Law School	30	285
Others	154	16,959
Total	5,533	211,186

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

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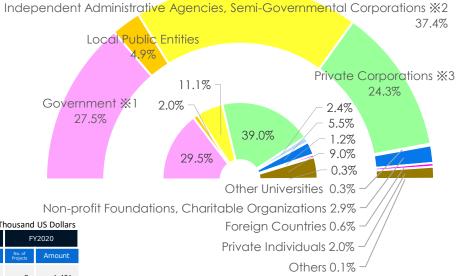
Types of External Entities Contributing Research Funds

		(S=#111) Thousand US Dollars
Type of External Entities	Number of Projects	Amount
Government*1	1,427	53,459
Local Public Entities	99	9,544
Independent Administrative Agencies, Semi-Governmental Corporations*2	538	72,606
Private Corporations*3	1,886	47,188
Other Universities	115	553
Non-profit Foundations, Charitable Organizations	267	5,674
Foreign Countries	56	1,188
Private Individuals	438	3,915
Others	16	215
Total	4,842	194,342

				-					T	housand	US Dollars
*1	Government	F١	2016	FΥ	2017	F	Y2018	F١	/2019	F	/2020
	Funding sources	No. of Projects	Amount	No. of Projects	Amount	No. of Projects	Amount	No. of Projects	Amount	No. of Projects	Amount
	Ministry of Internal Affairs and Communications	10	1,506	10	1,988	9	1,254	6	684	9	1,401
	Ministry of Education	1,066	36,091	1,064	38,067	1,152	37,941	1,211	36,044	1,282	40,827
	Ministry of Health, Labor and Welfare	61	2,311	71	1,749	74	2,041	92	4,355	111	6,273
	Ministry of Environment	8	1,334	4	301	3	119	3	647	8	1,890
	Others	12	863	16	4,976	21	4,730	20	5,082	17	3,068
	Total	1,157	42,106	1,165	47,080	1,259	46,086	1,332	46,812	1,427	53,459

*2	Independent Administrative Agencies, Semi-Governmental Corporations	F١	/2016	F١	/2017	F١	/2018	Fγ	/2019	F١	(2020
	Funding sources	No. of Projects	Amount								
	NICT *a	20	1,784	10	1,352	12	735	14	559	23	782
	JST *b	81	24,814	88	20,778	99	21,956	89	17,817	101	12,797
	AMED *c	216	48,634	220	43,108	289	52,110	248	49,282	254	51,405
	NEDO *d	18	1,866	16	2,173	22	3,695	20	3,860	22	2,792
	Others	111	2,158	110	3,010	132	3,943	148	6,905	138	4,830
	Total	446	79,256	444	70,422	554	82,440	519	78,423	538	72,606

*3	Private Corporations	FY	2016	F١	2017	Fγ	2018	Fγ	2019	F١	/2020
	Funding sources	No. of Projects	Amount								
	Specified Contributions	794	12,012	734	15,525	739	13,664	674	11,365	638	9,783
	Commissioned Research	222	10,212	228	7,819	253	8,933	153	3,807	130	3,705
	Joint Research	597	18,345	597	20,388	829	27,017	961	29,870	984	29,226
	Others	46	401	104	1,255	89	3,521	141	5,813	134	4,474
	Total	1,659	40,969	1,663	44,986	1,910	53,134	1,929	50,855	1,886	47,188



- Government %1
- Local Public Entities
- Independent Administrative Agencies, Semi-Governmental Corporations ※2
- Private Corporations 33
- 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 *The exchange rate from FY2016 to FY2019 is 110 JPY per 1 USD; the exchange rate of FY2020 is 111 JPY.

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

Types of External Entities Co	ontributing Researc	h Funds to Each	Campus			(\$=¥111) Thousand US Dolla
Campuses		Government Organizations	Non- Government Public Organizations	Private Corporations	Others	Total
Mita Campus	No. of Projects	216	6	18	1	241
	Amount	8,606	104	1,385	104	10,199
Hiyoshi Campus	No. of Projects	154	14	97	5	270
	Amount	4,095	370	3,244	67	7,776
Shinanomachi Campus	No. of Projects	948	212	984	456	2,600
	Amount	74,822	4,293	25,529	4,352	108,996
Yagami Campus	No. of Projects	387	93	383	41	904
	Amount	19,113	1,285	8,344	107	28,849
Shonan Fujisawa Campus	No. of Projects	154	77	285	47	563
	Amount	13,626	1,617	5,798	796	21,837
Shiba-Kyoritsu Campus	No. of Projects	82	15	43	3	143
	Amount	3,315	680	905	5	4,905
Shin-Kawasaki Town Campus	No. of Projects	4	3	35	0	42
	Amount	304	40	951	0	1,295
Tsuruoka Town Campus	No. of Projects	17	11	28	1	57
	Amount	1,066	6,537	437	0	8,040
Tonomachi Town Campus	No. of Projects	3	5	13	1	22
	Amount	1,118	604	595	128	2,445
Total	No. of Projects	1,965	436	1,886	555	4,842
	Amount	126,065	15,530	47,188	5,559	194,342

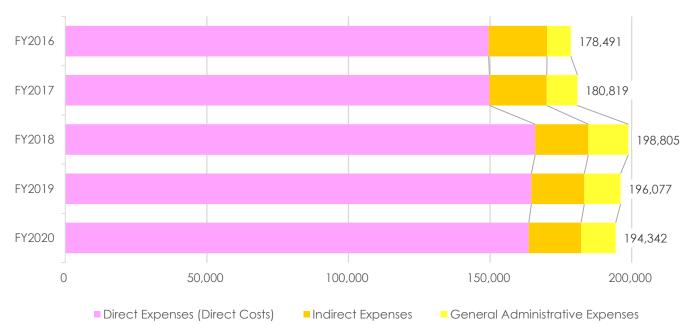
* Totals are compiled based on the home campuses (in principle, the affiliation of the research project leaders). The actual research, however, may take place at different campuses.

*The exchange rate from FY2016 to FY2019 is 110 JPY per 1 USD; the exchange rate of FY2020 is 111 JPY.

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

					Thousand US Dollars
Type of Research Funds	FY2016	FY2017	FY2018	FY2019	FY2020
Direct Expenses (Direct Costs)	149,453	149,758	165,932	164,543	163,644
Indirect Expenses	20,654	20,234	18,746	18,709	18,457
General Administrative Expenses	8,385	10,827	14,127	12,825	12,241
Total	178,491	180,819	198,805	196,077	194,342

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



Definition

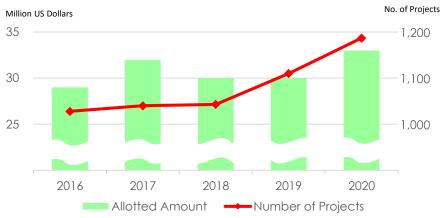
Indirect Expenses: Expenses allocated equivalent to a certain percentage of the Competitive Research Funds in addition to the direct expenses for the research to supplement administrative and operational costs of the institution to which project leaders are affiliated.

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

Institu	ition by Number of Projects (FY2020)		Million US Dollars
Rank	Name of Organization	No. of Projects	Amount
1	The University of Tokyo	4,202	203
2	Kyoto University	3,022	126
3	Osaka University	2,665	94
4	Tohoku University	2,525	88
5	Kyushu University	1,943	64
6	Nagoya University	1,819	72
7	Hokkaido University	1,719	55
8	University of Tsukuba	1,357	38
9	Hiroshima University	1,220	26
10	Keio University	1,187	33
11	Kobe University	1,163	29
12	Waseda University	1,131	27
13	Okayama University	1,001	21
14	Kanazawa University	962	19
15	RIKEN	925	44
16	Chiba University	911	22
17	Tokyo Institute of Technology	889	40
18	Niigata University	794	16
19	Tokyo Medical and Dental University	730	16
20	AIST	705	19
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	Amount Awarded to all organizations		1,985

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

Fiscal Year	Rank	Number of Projects	Allotted Amount	Total funds awarded to all organizations
2016	11	1,028	29	1,906
2017	11	1,040	32	1,924
2018	11	1,043	30	1,926
2019	11	1,110	30	1,958
2020	10	1,187	33	1,985



*Source: MEXT website

https://www.mext.go.jp/a_menu/shinkou/hojyo/1422129_00001.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.

*The exchange rate from FY2016 to FY2019 is 110 JPY per 1 USD; the exchange rate of FY2020 is 111 JPY.

Number of Researchers at Keio University in FY2020

Number of Researchers

As of March 31, 2021

Campuses	Tenured/ Semi-tenured Researchers	Project Researchers (Non-tenured)	Researchers (Non-tenured)
Mita Campus	407	39	4
Hiyoshi Campus	334	15	19
Shinanomachi Campus	543	194	153
Yagami Campus	264	35	29
Shonan Fujisawa Campus	180	54	13
Shiba-Kyoritsu Campus	66	11	0
Total	1,794	348	218

Development of Future Researchers

		No. of Doctorates Conferred	No. of Students Enrolled in Doctoral Courses		
Graduate Schools	Course Doctorates	Dissertation Doctorates	Maximum Occupancy	No.of Students Enrolled	
Graduate School of Letters	3	3	135	92	
Graduate School of Economics	7	0	45	42	
Graduate School of Law	4	2	90	61	
Graduate School of Human Relations	5	3	33	44	
Graduate School of Business and Commerce	2	1	60	13	
Graduate School of Medicine	92	56	320	400	
Graduate School of Science and Technology	83	0	450	287	
Graduate School of Business Administration	0	0	24	1	
Graduate School of Media and Governance	21	2	150	202	
Graduate School of Health Management	5	0	30	42	
Graduate School of System Design and Management	5	0	33	67	
Graduate School of Media Design	11	0	30	63	
Graduate School of Pharmaceutical Sciences	11	2	29	69	
Subtotal	249	69	1,429	1,383	
Total		318			

Number of JSPS Research Fellows at Keio University

As of March 31, 2021

Research Fellows by Affiliation

Faculties, Graduate Schools, Research Institutions	FY2016	FY2017	FY2018	FY2019	FY2020
Faculty/Graduate School of Letters, Graduate School of Human Relations	19	18	18	20	24
Faculty/Graduate School of Economics	10	13	8	4	7
Faculty/Graduate School of Law	5	8	11	11	5
Faculty/Graduate School of Business and Commerce	4	4	4	3	2
Faculty/Graduate School of Medicine	33	32	30	30	27
Faculty/Graduate School of Science and Technology	61	65	56	63	57
Faculty of Policy Management, Faculty of Environment and Information Studies, Graduate School of Media and Governance	15	19	17	13	18
Faculty of Nursing and Medical Care, Graduate School of Health Management	0	0	0	0	0
Faculty of Pharmacy, Graduate School of Pharmaceutical Sciences	7	4	3	3	0
Graduate School of Business Administration	0	0	1	1	1
Graduate School of System Design and Management	0	0	0	1	1
Graduate School of Media Design	1	1	0	0	0
Law School	1	1	0	0	0
Affiliated Research Institutes	2	8	2	3	4
Total	158	173	150	152	146

Number of JSPS Research Fellow by Category

			10	-	
Category	FY2016	FY2017	FY2018	FY2019	FY2020
DC1	60	56	50	49	58
DC2	42	44	40	48	39
PD	35	48	41	36	32
SPD	0	1	1	1	1
RPD	9	9	3	3	4
CPD	-	-	-	1	2
Foreign Researchers	12	15	15	14	10
Total	158	173	150	152	146

*The "Research Fellowship for Young Researchers" program is divided into 5 categories, DC, PD, RPD, SPD, and CPD. Graduate and doctoral students are mainly accepted, 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 Japanese researchers in Japanese universities, etc.

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

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	520	Researchers employed by research, educational, or medical institutions other than the School of Medicine.
Research Associates of Faculty of Science and Technology	24	Researchers participating in research without a contract for commissioned research.
Researchers of KLL, Keio Leading-edge Laboratory of Science and Technology	25	Researchers participating in research under a commissioned research contract.
Distinguished Researchers, Keio Research Institute at SFC	2	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	345	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	136	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	53	Researchers participating in research without a contract for commissioned research.
Visiting Professors and Researchers (See Table A)	521	
Others (See Table B)	1,732	
Total	3,358	

Table A : Number of Visiting Professors and Researchers

Job Titles, Status	Mita/Hiyoshi	Shinanomachi	Yagami	Shonan Fujisawa	Shiba-Kyoritsu	Total
Visiting Professors	39	26	30	5	0	100
Visiting Associate Professors	17	18	8	5	0	48
Visiting Assistant Professors	14	13	4	14	0	45
Visiting Instructors	2	9	18	0	0	29
Visiting Research Fellows	89	113	66	9	0	277
Visiting Junior Research Fellows	13	3	6	0	0	22
Total	174	182	132	33	0	521

Table B : Others

Campuses	Research Institute	* No. of Researchers at Keio University	No. of Researchers from Outside Keio	Total
Mita	Keio University Art Center	27	25	52
	Teacher Training Center	48	64	112
	Keio University Global Research Institute	320	169	489
	Institute for Economic Studies	77	55	132
	The Keio Institute of Cultural and Linguistic Studies	26	98	124
	International Center	8	16	24
	Keio Economic Observatory	45	77	122
	Institute of Oriental Classics (Shido Bunko)	9	2	11
	Center for Japanese Studies	10	48	58
	Keio Institute of East Asian Studies	20	21	41
	Fukuzawa Memorial Center for Modern Japanese Studies	27	45	72
	Institute for Journalism, Media and Communications Studies	12	27	39
Hiyoshi	Research Institute for Digital Media and Content (DMC)	10	0	10
	Institute of Physical Education	18	0	18
	Health Center	16	0	16
	Keio Research Center for Foreign Language Education	40	2	42
	Sports Medicine Research Center	8	29	37
	Keio Research Center for the Liberal Arts	193	0	193
	Research and Education Center for Natural Sciences	76	64	140
Total		990	742	1,732

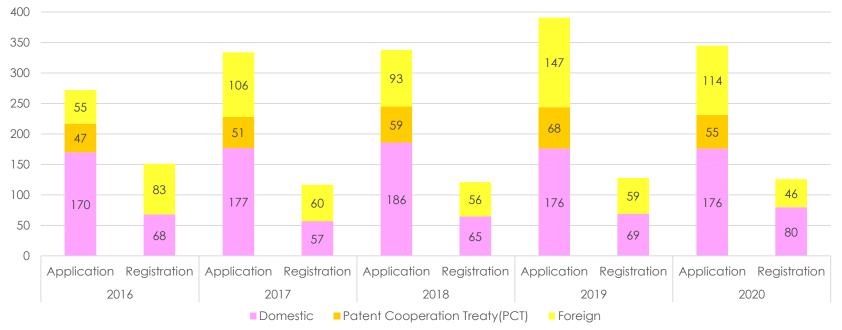
Researchers at Keio University: the figure indicates the total number of researchers including teachers in the affiliated elementary and secondary

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 two institutions is counted as one researcher of each.

Table B was revalued in 2020 and included the number of researchers who were not counted in the previous years.

Number of Patent Applications and Registrations



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

